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ABSTRACT

This report describes the methods and results of a 29-month project to make available to Kentucky's school children the best and most recent programs and techniques in innovative teaching through an improvement of curriculum management. The project identified and examined eight management areas and provided consultative service to local district administrative personnel in an effort to improve the management of the rescheduled school year, grade level organizational plans, differentiated staffing patterns, administrative and instruction staff development programs, flexible-modular scheduling plans, nongraded-continuous progress plans, computer technology programs for education, and instructional media center plans. To improve the local school district administrators' knowledge and expertise, the project director utilized district seminars, consultative services to local district personnel, mobile seminars, statewide conferences, summer institutes, and research projects. Included in the appendix is a directory of recommended consultants in the area of curriculum improvement, a model for a 9-week semester school, two plans on individualized instruction and flexible student progression, and a model for assessing educational success in Kentucky's schools. (Author/DN)

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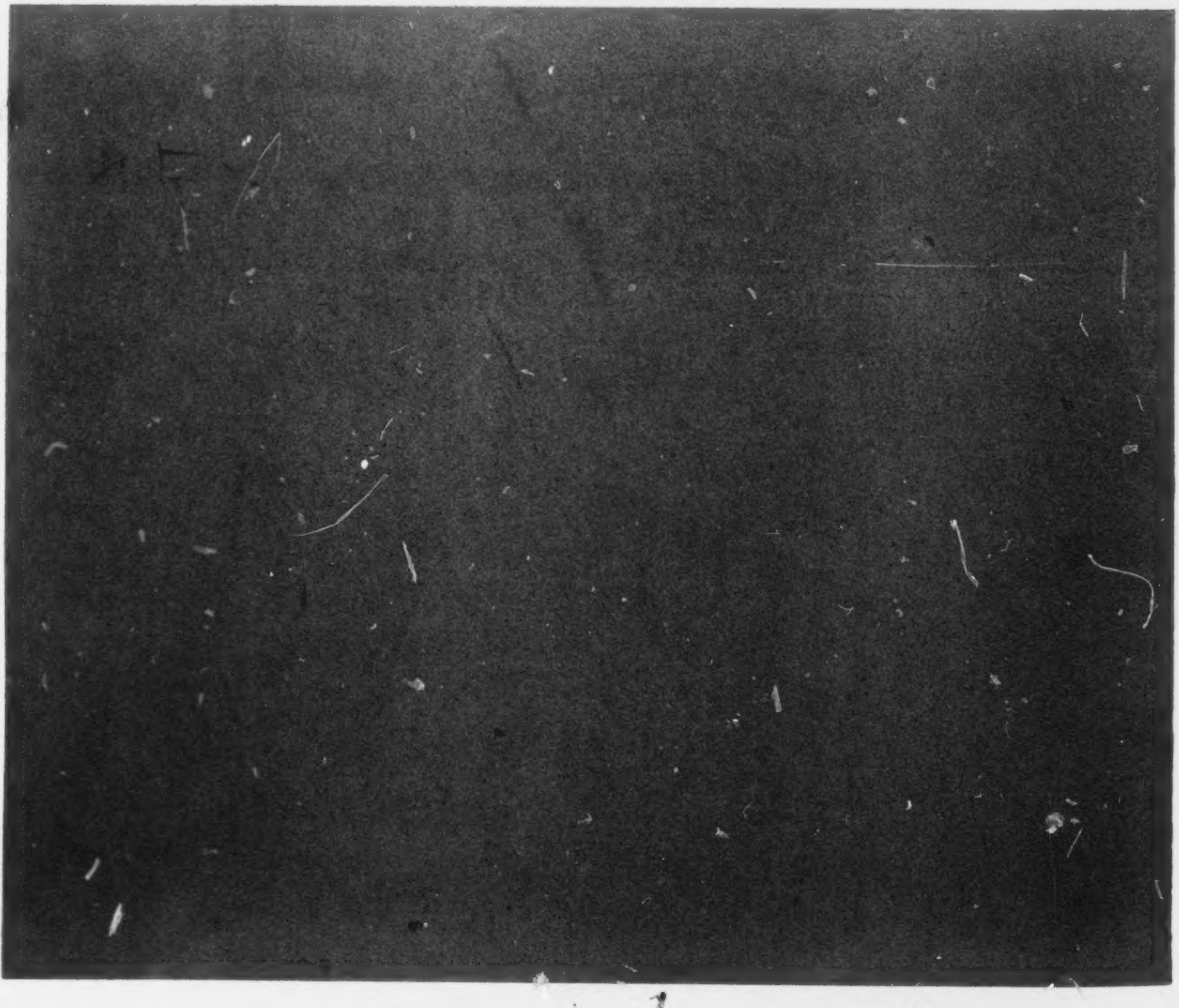
final report

a project to improve the administration and management of the curriculum in kentucky

ESEA TITLE III PROJECT ☐ PROJECT NO. 67-03389-0 ☐ OEG NO. 3-7-703389-4809



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FOREWORD:

This document is being presented to the U. S. Office of Education ESEA Title III Project Division as a final report. The contents herein are observations, accounts, etc., of the project director and are not intended as expressions of personnel from the U. S. Office. The document is intended to provide those concerned with information concerning the action strategies employed by the project director to reach stated objectives presented in the first and second grant proposals.

The project was in operation from July of 1967 to December of 1969, a period of 29 months. The project was terminated before the original three year projection because of three basic factors:

1) an anticipated cutback in ESEA Title III funds for FY 1970,

2) the project director felt that enough project goals had been sufficiently met wherein the Kentucky Association of School Administrators could, during the 1969-70 academic school year, secure funds and restructure their organization to continuously promote and support programs for improved curriculum management, and

3) the State Department of Education in Kentucky in the summer of 1969, adopted a policy not to support ESEA Title III Projects that were statewide in program scope and program activities.

The reader, as he or she reviews the document, should keep the second reason for project termination clearly in focus and be aware that it was the paramount interest of the project director to promote a climate wherein one organization, the Kentucky Association of School Administrators, could be restructured to a point that it could consistently, systematically and professionally promote and support sound educational program change. The project director is convinced that the latter goal has been met and that Kentucky School administrators are now at a "pivotal juncture" for organized promotion of creative leadership.

This report reviews the activities initiated and supported by the project. Hopefully, it provides the reader a clearer picture of "programmatic thrusts" promoted by the project staff. Also enclosed are four "models" developed through project activity. Hopefully, the models can be transplanted from local districts to local districts within Kentucky and in one instance from the State Department of Education to educational agencies external to Kentucky.

Morris Osburn
Frankfort, Kentucky

December 1, 1969

INTRODUCTION:

The Kentucky Association of School Administrators throughout the longevity of the project described herein supported the activities included and also was instrumental in initiating the proposal. The Association served as the "Agency Vehicle" through which the project director conducted the activities outlined in this publication.

The Association presents the publication in the hope that local chief school administrators can secure a broad or "macro view" of the intent, design, and development of the activities supported through the project. Also the Association, because of its support, feels the final report should be made available on a broad scale to the different levels of administrative personnel throughout the State.

The activities described in the document indicate a receptivity on the part of local school administrators to work toward the development and implementation of more productive management programs in curriculum areas. This is encouraging and points up the fact that administrators are responsive to change. Correspondent to the above those reviewing the document will note that many consultants were made available to Kentucky personnel and that the State Department of Education, state and private universities, and related agencies collaborated and supported project activity. The latter approach indicates that "large bloc agencies" can be brought together to explore, examine, and develop programs for improved delivery systems of learning for children.

The Kentucky Association of School Administrators through its officers and Board of Directors want to express their appreciation to Mr. Fred D. Trammell, the Superintendent of the Shelby County Board of Education and members of the Shelby County Board for their having served as the Local Board of Record and Fiscal Agent to the project. Without their dedication and support the project would not have been possible. The Board would also like to thank Dr. Morris Osburn, the project director for his leadership in conducting project activities.

Finally, the document clearly indicates that the Association pledged itself to an action program of future activity wherein those activities initiated and supported through the utilization of Federal funds described in this project would be continued. Every local chief school administrator should, upon reading this document, make a new commitment to support the Association in its endeavor to continue to support activities designed for the improvement of the management and administration of the curriculum. Through a new commitment, renewed and continuous energy, systematic dedication, and dynamic support on the part of Association members, more productive educational delivery systems for learning and human growth and development can be brought to every child in Kentucky.

Samuel Alexander, President
Kentucky Association of School Administrators
Frankfort, Kentucky
December 1, 1969

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I. Project Objectives:

The original proposal and the continuation grant proposal indicated that the primary and ultimate project goal was to make available to Kentucky's school children the best and most recent programs and techniques in innovative teaching. The above documents indicated that in order to accomplish the aforementioned, it would be essential to also reach the following stated objectives:

a) cause the local school administrator to realize he is the pivotal point or agent of change;

b) cause the local chief school administrator to redefine his role in education with emphasis being placed on his responsibility to promote educational leadership;

c) bring to the attention of the local chief school administrator the rapidly changing cultural, economic, and social aspects of the world and American civilization;

d) create a programmatic climate wherein the local chief school administrator will and can exchange ideas with other levels of school administrators on a co-equal basis;

e) and cause the local chief school administrator to become an agent of invention and not a deterrent to progress.

II. Project Procedures Employed to Reach Stated Objectives:

a) the appointment of an advisory council to work with the project director in his attempt to reach project goals.

b) the project director was charged with the singular responsibility to invent and establish procedures wherein the local chief school administrator would participate in project activities

c) through the cooperation of the Project Advisory Board, personnel from the State Department of Education, personnel from state universities and personnel from related agencies identify critical areas of weaknesses in curriculum management and administration that seemingly have a commonality throughout the Commonwealth.

d) invent and implement procedures for attacking problem areas identified by:

    1) the utilization of recognized authorities in seminar situations

    2) the utilization of participants in small group situations;

    3) the identification and dissemination of literature germane to problem areas identified in seminar - study - group activities;

4) locate actual experimental curriculum projects wherein a group of local administrators could examine and evaluate the above in terms of program transplantations into their local systems;

5) the utilization of materials that have been produced and scheduled for production that are germane to the program areas identified through seminar and study group activity.

III. Proposed Implementation of the Procedures Broken Down into Three Major Time Phases:

a) Phase 1: from receipt of the grant to July 1, 1968:

1) appoint an advisory council;

2) select and employ a project director;

3) aquaint local chief school administrators and other educational agency personnel as to the intent of the project;

4) encourage the above to participate in envisioned project activity;

5) conduct a statewide conference of school administrators collaboratively supported by the Kentucky Association of School Administrators to clearly define the goals of the project and identify with the participants action strategies the participants might employ to insure project success;

6) identify study themes, curriculum areas, etc., that school administrators need to direct their energies in an attempt to improve the management of the curriculum and;

7) involve local administrators in seminar study group situations wherein they can begin a process designed to reach the previously stated objectives.

b) Phase II: From July 1, 1968 through June 30, 1970 complete the following action strategies:

1) continue those activities stated in Phase I and re-cycle those activities in Phase I that gave indication of an ultimate satisfactory procurement of project goals;

2) identify--set up--and make provisions wherein local school administrators can observe and evaluate programs designed to improve the delivery system of educational learning experiences for children.

c) Phase III: From July 1, 1969 through June 30, 1970 complete the following strategies on project missions:

1) continue those activities conducted during Phase I and Phase II that have given evidence of success;

2) invent any new activities that were natural outgrowths of the activities conducted in Phase I and II of Project life.

3) promote detailed plans for the operation of similar project activities in future years taking into consideration the reduction or withdrawal of Federal funds.

IV. Action Strategies Employed to Implement the Missions Identified in the Aforementioned Time Phases

a) The project director conducted a series of informational strategy conferences with the base writer of the document and selected personnel instrumental in the initiating and supporting efforts to secure approval of the project. The above cadre were utilized to fully aquaint the director with the intent of the document.

b) The project director selected five recognized educational leaders familiar with Kentucky and its school structure to serve as "input review agents" for project activity. The above were used to aid and assist the director to design an operational framework or programmatic structure to reach the stated objectives. The five "input review agents" met twice in Louisville and reviewed strategies proposed by the director. The review agents were:

Dr. Truman Pierce, Dean
College of Education
Auburn University

Dr. Arlis Roaden, Associate Director
School of Graduate Studies
College of Education
Ohio State University

Dr. Charles E. Martin, Superintendent
Chattanooga City Schools
Chattanooga, Tennessee

Dr. Warren Ketchum, Professor
College of Education
Michigan University

Dr. Charles Glatt, Associate Professor
Faculty of Educational Development
College of Education
Ohio State University

The above consultants along with the base writer and the initiators of the project, made the following recommendations:

1) The local school administrator should be initially involved in district seminars; and the seminars should be conducted across the state.

Diagram #1
Survey Results Indicating
Program Areas Kentucky
School District Superintendents
Are Now Operating Or Plan To
Initiate On Or Before 1972

Program Area	No. of School Districts Reporting	No. of School Districts Now Operating The Program	No. of School Districts That Plan to Put The Program In Operation By 1972	No. of School Districts Reporting That They Do Not Plan To Put The Program In Operation	Percentage of School Districts Reporting That Indicate They Will Implement The Program By 1972
1. **Computer Technology: Superintendent Indicates the district now uses or plans to use a computer for data processing services or for computer instructional purposes**	144	81	15	48	67%
2. **Instructional Media: Superintendent indicates he now utilizes or will develop a learning program featuring the utilization of a variety of instructional media aids**	136	48	33	55	61%
3. **Differentiated Staffing Patterns: The Superintendent indicated that the district now utilizes or plans to utilize class management arrangements featuring team teaching, large group instruction, small group activity, cooperative team planning, use of a para professionals and interns**	146	45	37	63	57%
4. **Non-Graded** Continuation **Progress Plans:** The **Superintendent reported that some schools in the district now or will by 1972 utilize a non-graded progress plan for advancement**					

4/a

Diagram #1

Program Area	No. of School Districts Reporting	No. of School District Now Operating The Program	No. of School District That Plan To Put The Plan In Operation By 1972	No. of School Districts Reporting That They Do Not Plan To Put The Program In Operation	Percentage of School Districts Reporting That Indicate They Will Implement The Program By 1972
4. (Continued) on the part of students	144	37	29	78	46%
5. Administrative and Instructional Staff Development Programs: The Superintendent indicated that the district now has or plans to implement a staff development program utilizing sensitivity laboratory training, group dynamics, program other than the traditional in-service training programs.	144	35	22	89	40%
6. Grade Level Organizational Structure Plans: The Superintendent indicated his schools are now organized or will be organized by grade levels other than the 8-4, 6-6, or 6-3-3 plan.	138	15	34	89	36%
7. Flexible Modular Scheduling: The Superintendent indicated that some schools in his district now or plan to by 1972 utilize a daily schedule that is flexible and in different time modules than traditionally found in most schools	136	17	22	97	29%
8. Extended School Year: The Superintendent reported that he now operates some schools or plans to on a year round basis and that all children in the district have a chance to attend the school.	144	2	11	133	.09%

4(b

2) The areas of program development to be reviewed in the district seminars should be identified by the school administrator in the field.

3) Consultants used in the seminars should be practitioners that have designed, developed, and implemented programs under review.

4) The project director should, through a process of conducting the district seminars, identify program areas that local school district superintendents reported as "high priority areas" for implementation at the local district level.

5) The statewide conferences should be utilized to relate to local school administrators "broad issues and concerns" facing school administration at all levels.

6) Universities in Kentucky should be used as an agency to aid and assist the project director in designing and conducting summer institutes wherein local school administrators could become more knowledgeable and expertise concerning the programs identified in statewide conferences and district seminars.

7) The project director should design mobile traveling seminars wherein local school administrators could make on-site examinations of programs identified in the district seminar, statewide conference, and summer institute activities.

8) The project director should seek and develop a working relationship with the State Department of Education to promote research, program development, etc. germane to the promotion of educational endeavor in Kentucky.

9) The project director should serve the local district as a consultant and support agent for the identification of program management and change.

10) The project director should work with the Kentucky Association of School Administrators in a concerned manner and utilize that agency as the "base vehicle" to design and conduct project activities; and promote the restructuring of that organization wherein it could, upon the withdrawal of Federal funds, continue to support similar activities initiated by the project.

V. Evaluation Areas

The project was continuously evaluated by the project director in terms of the types of program areas identified and reviewed by administrators in district seminars, state conferences, summer institutes, consultant sessions, and mobile seminars. Five areas are included below as evaluation areas.

a) curriculum management areas identified, examined, and developed at the local district level;

b) the percentage of attendance in project activities by eligible participants;

c) the quality of work undertaken by project participants;

d) the type and kind of consultants utilized for seminars, conferences, etc.

e) the degree of cooperation provided the project director by the State Department of Education, state universities, and personnel from related educational agencies in Kentucky, and;

f) self appraisal by project participants.

V-A. Below is a list of the management areas identified, examined and developed with project participants.

1) The Role of the Superintendent as an Instructional Leader

2) The Role of the Superintendent in Developing Extended or Year-Around School Programs.

3) The Role of the Superintendent for Designing, Developing, Implementing an Instructional Program for the "Middle-Years School."

4) The Role of the Superintendent in Initiating, Developing and Implementing Plans for the Utilization of Educational Television

5) The Role of the Superintendent in Initiating Professional Negotiations and the Issues involved in PN for the Development of an Instructional Program

6) Programs for the Evaluation of Pupil Growth and Progress

7) Designing and Developing Programs for the Utilization of Local, State, and Federal Funds

8) Sensitivity Laboratory Training Seminars for School Administrators

9) The Superintendent and the Development of an Individualized Instructional Program

10) The Utilization of Computer Technology for Administrative Service Programs and Computer Assisted Instructional Programs

11) The Superintendents Role in Designing Educational Programs for Educational Facilities

12) Differentiated Staffing Programs for Individualizing Instruction

13) The Design, Development and Implementation of Flexible Modular Schedules

14) The Role of the School Administrator in Promoting Educational Endeavor through State Administrative Associations

15) The Design, Development, and Implementation of a Nongraded Delivery System of Educational Experiences for grades 1 through 12: The Cloverport Plan.

16) The Design, Development, and Implementation of a Nongraded Program for Elementary School Children: Maceo-Stanley School Plan

17) A Model for Assessing Educational Success in Kentucky Schools

18) A "Short" Design for the 9 Week Semester School: An Internal Organizational Support System for Secondary Education.

Diagram number 1 reveals 8 "high priority" areas of curriculum administration and management that project participants identified as areas that they wanted to direct increased energies toward development and implementation. Diagram number 1 also reveals the degree of program development presently being promoted and planned for in the future in the 8 "high priority" areas.

The above areas were identified by project participants in personal consultative interviews with the project director, district seminars, and statewide conferences. Project participants were provided "in depth" information concerning the 8 areas through personal consultation with the project director. The utilization of consultants in district seminars, statewide conferences, mobile seminars, and university based institutes. Project participants were provided literature germane to the above upon a request to the project director and through "handouts" made available at district seminars, statewide conferences, university based institutes, and mobile seminars. Some of the literature was purchased, some was provided by the consultants utilized, and some were produced by the project director.

V-B. The Percentage of Attendance in Project Activities by Eligible Participants

Project activities conducted were designed to "sensitize" school administrators throughout the Commonwealth wherein they would promote, support, and develop more effective curriculum management systems at the local district level. In all activities the local school district superintendent was the "target participant." Diagram number 2 reveals the type of activities conducted by the project and the number of participants attending those activities.

Diagram number 2 reveals a high degree of receptivity on the part of the participant to engage in regional seminars, summer institutes, mobile seminars, statewide conferences, and individual consultation sessions. Programmatically, local district superintendents are moving to newer or emerging management areas of the curriculum as shown in diagram number 1.

Diagram # 2

Percentage of Eligible Participants Participating in Project Activities

Type of Activity	Number of Activities	Number of Participants	Percentage of Participation
Regional Seminars	33	900	84%
Statewide Conferences	5	1300	73%
Summer Institutes	5	22[illegible]	96%
Mobile Seminars	2	101	90%
Research Projects	1	NA	NA
Film Production	1	NA	NA
Individual Consultative Review	175 est.	NA	NA

V-C. Quality of Work Undertaken by the Project Participants

It has been previously reported the degree to which administrators are moving toward newer arrangements of curriculum management. (Diagram Number 1) Each of those areas can be thought of as management areas. A review of current literature in education reveals that the above 8 areas are considered as important to the general areas of curriculum management in that with the implementation of any one program, the curriculum would probably need general revision.

The participants in each activity conducted indicated a high degree of participation. Since the project director conducted approximately 175 consultative sessions concerning curriculum management indicates that the participants responded in a positive manner. Correspondent to the above, the Kentucky Association of School Administrators will through their district structure, continue to conduct district seminars concerning the 8 areas reported in diagram number 1.

Correspondent to the above, the project director offers as evidence, the four models or programs enclosed in the appendix to this document. Kentucky is one of the few states attempting to design a model and implement same wherein they can assess the success of a child. Also, the 8 areas reported are in keeping or closely related to the priority areas reported to the Kentucky State Department of Education as vital to the areas needed to strengthen local educational agencies.

Also, the project director of the project described herein has been employed as a consultant to the State Department of Education to develop an Operational Model to Review and Improve Local School District Management Systems. Also, the project director has been assigned the task to develop new criteria for developing educational specifications prior to school construction. The above indicates that project participants want a high quality of work in areas related to those identified in the project described herein.

V-D. Utilization of Consultants for Project Activity

As evidence as to the utilization of consultants for project activity, the project director encloses a consultant service corps for the management of the curriculum. This consultant service corps was used in district seminars, statewide conferences, summer institutes, mobile seminars, project design, and research activities. The consultant service corps does not include personnel based in the state of Kentucky.

This document, the consultant service corps, will be made available to the public and private school districts operating in Kentucky in a special publication paid for by the Kentucky State Department of Education and the Kentucky Association of School Administrators. Correspondent to the above, the project director has developed a proposal for funding through ESEA Title V flow through funds wherein the consultant service corps could be further developed for ESEA Title III, Region II in Kentucky.

Beyond the above, the Kentucky Association of School Administrators has proposed and plans to design and develop "A Technical Consultant Service Corps" for utilization by several educational agencies operating throughout Kentucky. The above arrangement or system will or should eventually provide Kentucky an updated and continuous input of specialists capable of improving the administration and management of the curriculum. It is envisioned that the ESEA Title V project and the KASA Technical Consultant Service Corps would be computer based operations.

V-E. Degree of Cooperation Provided from Related Agencies

Several bureaus and divisions within the Kentucky State Department of Education collaborated on a continuous basis in designing, developing, and implementing project activity. They are listed below.

1) The Bureau of Administration and Finance
    a) Division of Computer Services
    b) Division of Statistical Services
    c) Division of Building and Grounds
    d) Division of Finance

2) Bureau of Pupil Personnel Services
    a) Division of Elementary and Secondary Education

3) Bureau of Pupil Personnel Services
    a) Division of Guidance Service
    b) Division of Attendance Accounting

4) Bureau of State & Federal Relations
    a) Title III ESEA
    b) Title I ESEA

The Superintendent of Public Instruction, the Deputy Superintendent of Public Instruction, and the Assistant Superintendents of Administration and Finance, Instruction, and Pupil Personnel Services were particularly supportive to the activities initiated through the project. The Division of Research was also most helpful in project activity.

The Eastern Kentucky Educational Development Corporation, Regions I, II, V and IVB of Title III ESEA were most cooperative in supporting project activity. The above Title III regional directors aided in identifing management areas in need of review and development.

Personnel from the state universitities were involved in designing, developing, and implementing university based summer institutes. The universities listed below provided space, food, and personnel in developing summer institutes.

University of Louisville
Sensitivity Training Laboratory for Administrators

Murray State University
Financing Education

Eastern Kentucky University
Evaluating Pupil Growth and Development
Differentiated Staffing for Individualized Instruction

The Bureau of Administration and Finance in the Kentucky State Department of Education collaborated in developing a proposal for establishing Educational Technology Centers in Kentucky. Although funds for the project have not been secured, it is envisioned that such centers will be made available in the 1970's. The State Department of Education also through the Bureau of Administration and Finance aided in publishing a book of readings germane to the activities conducted by the project described herein.

Other agencies were contacted and provided information to the project director concerning the appropriateness of examing the 8 areas identified in diagram number 1. These agencies are listed below.

The Kentucky School Boards Association
The Kentucky Association of Secondary School Principals
The Department of Elementary School Principals
The Louisville Chamber of Commerce: Division of Research
The Kentucky Education Association
The Kentucky Innovative Development Center
The Kentucky Educational Television Authority
The Kentucky Association of School Administrators

Each of the above agencies sent participants to project sponsored activities. The Kentucky Association of School Administrators was utilized as the "agency vehicle" through which the project director secured support for program activity and longevity support upon the withdrawal of Federal funds.

At the outset of the project, the KASA was not structured nor operationally defined to support regional seminars, mobile seminars, statewide conferences and upon the withdrawal of Federal funds continue supporting activities initiated and developed by the project. Diagram number 3 shows the 11 districts the KASA operated under. Diagram number 4 shows the KASA organizational structure at the outset of the project. Diagram numbers 5 and 6 show the proposed KASA structure for initation in August of 1970.

DIAGRAM # 3

KENTUCKY—TITLE III PROJECT
TO IMPROVE THE ADMINISTRATION AND
MANAGEMENT OF THE CURRICULUM
SEMINAR DISTRICTS

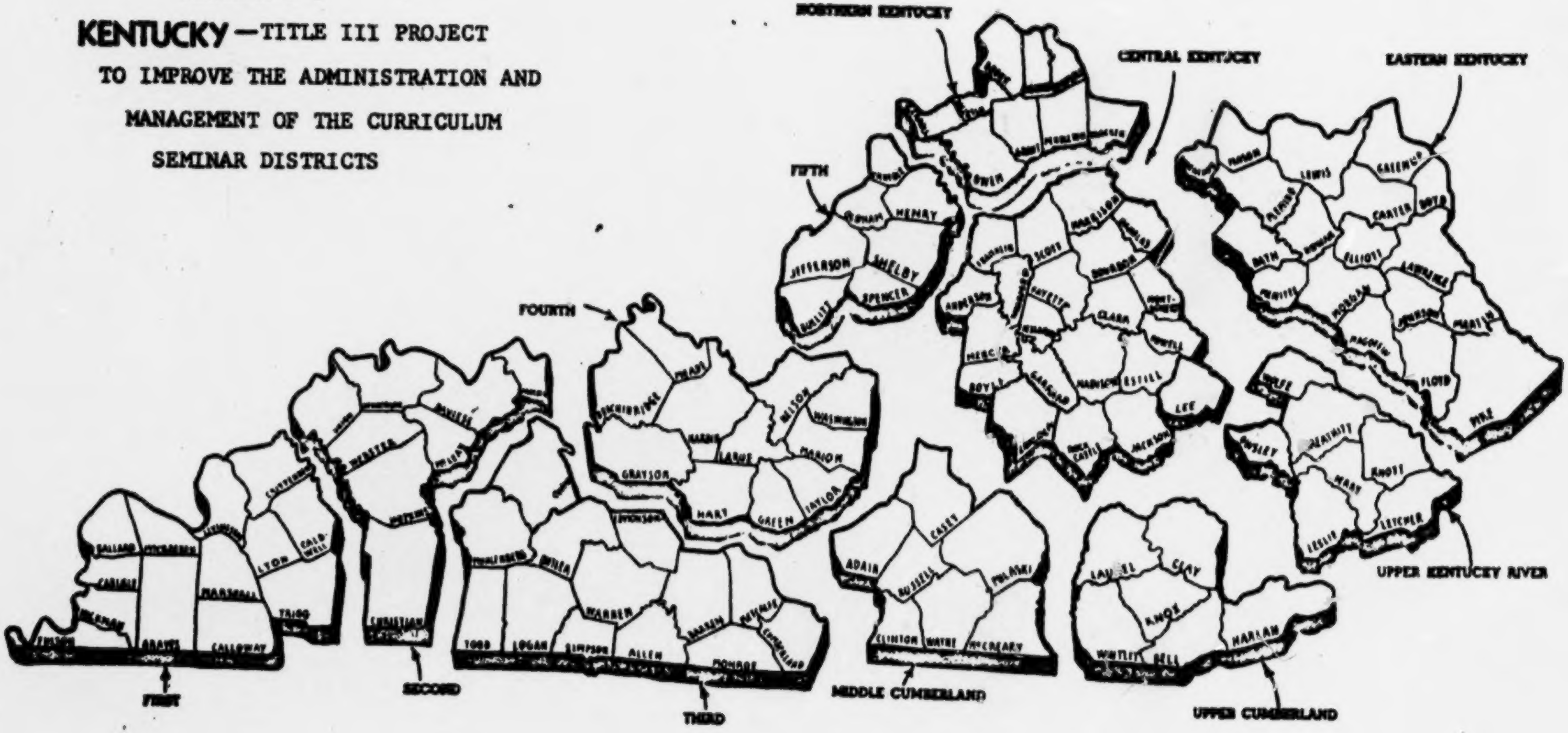

NORTHERN KENTUCKY
CENTRAL KENTUCKY
EASTERN KENTUCKY
FIFTH
FOURTH
UPPER KENTUCKY RIVER
FIRST
SECOND
THIRD
MIDDLE CUMBERLAND
UPPER CUMBERLAND
BALLARD
CARLISLE
HICKMAN
FULTON
GRAVES
MARSHALL
CALLOWAY
LYON
CALDWELL
TRIGG
CHRISTIAN
WEBSTER
DAVIESS
HOPKINS
TODD
LOGAN
SIMPSON
ALLEN
WARREN
BUTLER
MONROE
CUMBERLAND
BRECKINRIDGE
MEADE
HARDIN
GRAYSON
LARUE
HART
GREEN
TAYLOR
MARION
WASHINGTON
NELSON
JEFFERSON
SHELBY
HENRY
OLDHAM
SPENCER
BULLITT
ADAIR
CASEY
RUSSELL
PULASKI
CLINTON
WAYNE
McCREARY
LAUREL
CLAY
KNOX
WHITLEY
BELL
HARLAN
OWEN
GRANT
HARRISON
SCOTT
BOURBON
FAYETTE
ANDERSON
MERCER
BOYLE
CLARK
MADISON
ESTILL
LEE
POWELL
GARRARD
JACKSON
ROCKCASTLE
LINCOLN
MASON
LEWIS
GREENUP
CARTER
BOYD
FLEMING
ROWAN
ELLIOTT
LAWRENCE
BATH
MENIFEE
MORGAN
JOHNSON
MARTIN
MAGOFFIN
FLOYD
PIKE
BREATHITT
OWSLEY
KNOTT
PERRY
LESLIE
LETCHER

Diagram #4

Organizational Structure

The Kentucky Assoication of School Administrators

July 17, 1967

President

President Elect

Vice President

Secretary-Treasurer

Statewide Committees

Legislative Committee

Audit Committee

Research Committee

Membership Committee

District Level

11 Districts

--The Reorganized KASA

KASA STATE LEVEL ORGANIZATION

President

Executive Committee

Board of Directors

Standing Committees

Legislative
Membership
Research
Auditing
Ethics
Platform and Resolutions
Long Range Development
Publications and Communications
Conference Planning

KASA DISTRICT LEVEL ORGANIZATION

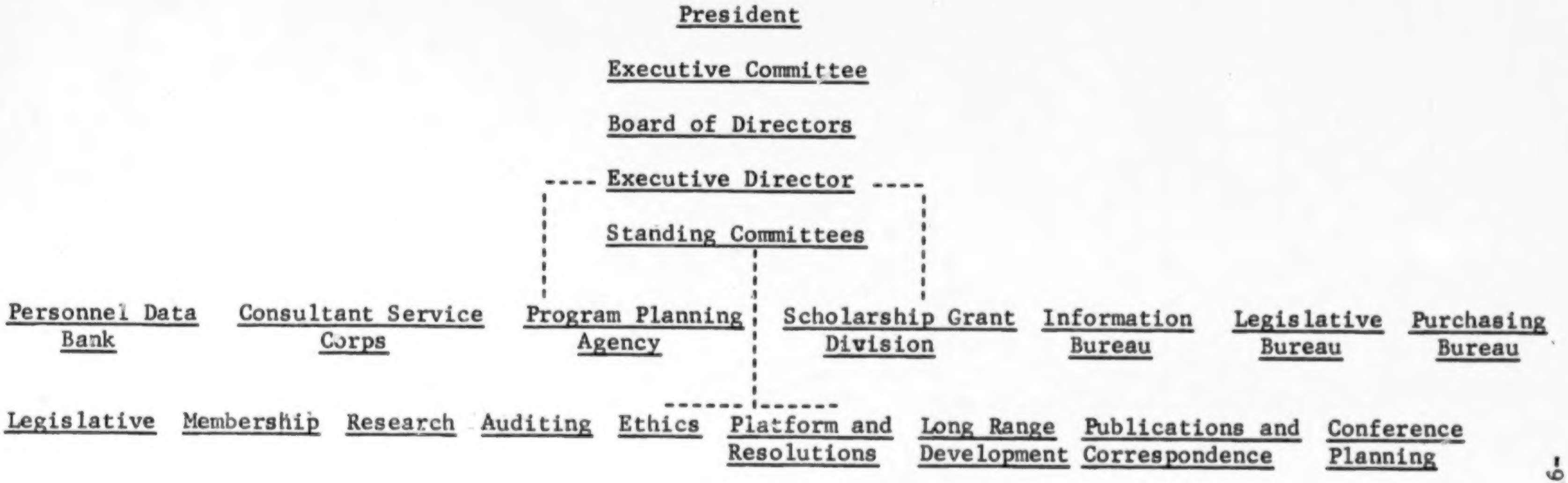
District Director

Steering Committee

Legislative Committee
Membership Committee
Special Projects Committee

Diagram #6

KASA STATE LEVEL ORGANIZATION



President

Executive Committee

Board of Directors

Executive Director

Standing Committees

Personnel Data Bank

Consultant Service Corps

Program Planning Agency

Scholarship Grant Division

Information Bureau

Legislative Bureau

Purchasing Bureau

Legislative

Membership

Research

Auditing

Ethics

Platform and Resolutions

Long Range Development

Publications and Correspondence

Conference Planning

KASA DISTRICT LEVEL ORGANIZATION

District Director

Steering Committee

Legislative Committee

Membership Committee

Special Projects Committee

Correspondent to the reorganization of the KASA, the Association has adopted a new constitution providing all levels of school administration the opportunity to become involved in Association affairs through a differentiated membership arrangement and dues schedule. As shown in diagram number 6, the Association envisions the employment of an executive director that will establish and develop 7 bureaus or agencies. The following agencies under his or her leadership are considered to be vital to the role of continuation of those activities initiated and supported by the project described herein. The agencies are listed below.

1) "The Personnel Placement Data Bank" The bank should provide educational agencies involved in the support and promotion of improved curriculum management programs a continuous updated list of personnel with competencies and available for employment in systems moving toward or implementing programs identified in diagram number 1.

2) "The Technical Consultant Service Corps" The above corps would include personnel with a high level of expertise in the 8 program areas listed in diagram number 1. The personnel included in the corps would be available for program design, program development, program evaluation and in one sense would be a national group. They would be paid for through local funds or through a consultative service fee.

3) "The Seminar Program Planning Agency" This agency would include selected personnel including the executive director that would work with KASA special project committees at the district and state level in structuring seminars conferences, and workshops to improve the personnel representing the local school district in their knowledge and expertise in curriculum management.

4) "The Scholarship-Grant Development Division" This division would aid and assist local district personnel in their attempt to secure scholarships for administrative personnel and aid and assist the same personnel in developing proposals designed to secure funding from Federal and private sources.

5) "The Administrators Information Bureau" The above bureau would publish and disseminate information, on a systematic basis, germane to curriculum management. The bureau would also seek ways and means to support and promote research concerning curriculum management.

Through a process of restructuring their organization, developing a potential for an expanded membership, securing and executive director, and developing the aforementioned agencies, the KASA moved to a programmatic posture wherein it could be the "longevity support agency" for continuation of programs initiated by the project described in this document. There is every indication that the KASA intends to accomplish the above.

V-F. Feedback From Participants

The project director made personal interview contacts with a sampling of local school district superintendents in each of the 11 seminar districts. The superintendents were asked to rate project activity in terms of their effectiveness as each related to the stated objectives included in this document. The results of those interviews are included below.

1) Ninety-two percent of the superintendents felt that the regional seminars, when utilizing external consultants were the most important activites included in the project.

2) The second most important activity reported was personal consultation by the project director.

3) The third most important activity was mobile seminars conducted to make "on-site" visitation of programs.

4) The fourth most important program was university based summer institutions.

5) The fifth most important activity was statewide conferences.

6) The sixth most important activity was research.

From the above it can be reported that the KASA should continue district seminars, insure that the executive director provide consultants to local districts, conduct mobile seminars, support university based institutes, design and conduct statewide conferences, and promote research. Also, the KASA agencies previously defined should be able to accomplish the above.

VI. Summary

The Project to Improve the Management of the Curriculum in Kentucky identified and examined 8 management areas and provided consultative service to local district administrative personnel wherein the latter could improve the following 8 curriculum management areas:

a) The Rescheduled School Year
b) Grade Level Organizational Plans
c) Differentiated Staffing Patterns
d) Administrative and Instructional Staff Development Programs
e) Flexible-Modular Scheduling Plans
f) Nongraded-Continuous Progress Plans
g) Computer Technology Programs for Education
h) Instructional Media Center Plans

The project director utilized the following procedures to improve the local school district administrators knowledge and expertise concerning the above management programs:

a) District Seminars
b) ConsultativeServices to Local District Personnel
c) Mobile Seminars
d) Statewide Conferences
e) Summer Institutes
f) Research Projects

The project director utilized the Kentucky Association of School administrators as the base vehicle agency to aid and assist him in designing, developing, and implementing project activities. The KASA was restructured and organizaed to continue selected activities, on a longevity basis, initiated and supported by the Project to Improve the Management and Administration of the Curriculum in Kentucky,

The Kentucky State Departmentof Education supported, on a broad base, the activities initiated and conducted by the project. Universities in the state and several related educational agencies supported project endeavor. The project through data secured from the state agency, utilization of state agency personnel and two consultants initiated the first steps wherein the success of children enrolled in Kentucky schools could be assessed.

VII. Implications and Recommendations

Project activity of the nature and kind conducted by the project described above must be supported by many agencies and must have access to a structure that can involve high level administrators on a consistent basis. The project realized a high degree of support in those activities conducted at a regional level. The above implies that any new project must have field directors to be effective over the long haul.

The project proved that one agency can be restructured to support, on a longevity basis, those activities inititated through Federal funds. Many agencies can be brought into the planning of activities but one agency must be the support agency. From all of the aforementioned parts of this document, the project director makes the following recommendations.

1) The KASA, upon the employment of an executive director, insist that he develop and implement the agencies outlined in this document.

2) The State Superintendent of Public Instruction employ one person to serve as an input agent of change and have that person keep abreast of curriculum management programs emerging across the nation. The agent should relate to and work with local school district superintendents in identifing and examining those management areas considered promising and effective.

3) The ESEA Title III Regional Directors consider, through the support of the Superintendent of Public Instruction, dedicate from their funds that amount of money necessary to secure a greyhound bus for permanent use in conducting mobile seminars both in the state and outside the state. The vehicle would be made available to all ESEA Title III Regions, local districts, state agency personnel and others. The mobile seminars would be planned by the "change agent" identified in item number 2 above and the vehicle would be chartered to other state agencies when not being used by educational agencies identified above.

The State Department of Education, the Kentucky Association of School Administrators, the Kentucky School Boards Association, the universities and colleges throughout the state, and the directors of the 8 ESEA Tit III Regions form a consortium and conduct, on an annual basis, a 4-day workshop designed to identify, examine, and develop action strategies concerning the issues, concerns and needs confronting education in today's social setting.

"An Educational Consultant Service Corps
For Improved Management of the Curriculum"

Introduction:

The ESEA Title III Project to Improve the Administration and Management of the Curriculum in Kentucky throughout its twenty-nine months of longevity conducted a series of district, regional, and statewide strategies designed to increase the knowledge and expertise of school administrators as they attempted to initiate activity in designing, developing, and implementing, and evaluating educational delivery systems of learning experiences.

The aforementioned project also conducted, on a collaborative basis, with state universities, summer institutes designed to examine the theoretical and functional framework of programs designed to promote an improved management system for curriculum endeavor on the part of Kentucky school administrators. Correspondent with the above activities, the ESEA Title III Project to Improve the Administration and Management of the Curriculum conducted two "mobile seminars" for school administrators wherein the latter could make "on site" examinations of programs identified as having or showing promise for curriculum improvement.

This document is an attempt to provide educational administrators, primarily engaged in curriculum development, a list of people that, in the estimation of the director of the above project, can serve as consultants to educational agencies in Kentucky as the latter attempt to program for curriculum improvement. The "Consultant Corps" enclosed, list personnel that have been utilized in projects conducted under the auspicies of the ESEA Title III Project aforementioned. The singular purpose of this document is intended to aid and assist educators involved in improving educational delivery systems for the youth enrolled in Kentucky schools.

The "Consultant Service Corps" herein is listed by program areas and after each consultant, the author identifies the area the consultant was utilized in terms of (1) designing programs, (2) program development, (3) program implementation, (4) program evaluation, (5) theoretician, and (6) practitioner.

Example:

General Curriculum Development

Morris Osburn, Consultant
Kentucky State Department of Education
Frankfort, Kentucky
(DP) (PD) (T) = Designs Programs, Program Development, Theoretician

The areas of consultant utilization is not an evaluation of the consultants' competencies, it merely denotes those areas in which the author has utilized the consultant! Many consultants have been utilized in two or more areas, thus there is a multiple listing. The "Consultant Service Corps" is focused on elementary and secondary education. Consultants listed are external; they are not based in Kentucky.

General School Administration:

Dr. Truman Pierce, Dean
College of Education
Auburn University
Auburn, Alabama
(D) (PD) (PI) (PE) (T)

Dr. Arlis Roaden, Associate Dean
Director of Graduate Studies
College of Education
Ohio State University
Columbus, Ohio
(PD) (PI) (T)

Dr. James Mason, Professor--Former Supt. of Clark Co., Nevada
College of Education
University of Tennessee
Knoxville, Tennessee
(PD) (PI) (T)

General School Administration (Cont.)

Dr. Charles E. Martin, Regional Area Commissioner
U. S. Office of Education
Room 406
226 W. Jackson Blvd.
Chicago, Illinois
(D) (PD) (PI) (T) (P) --Formerly Supt. of Chattanooga, Tenn.

Mr. Joseph J. Davies, Jr., Supt.
Parish of St. Bernard
Chalmette and La Coste Sts.
Chalmette, Louisiana
(PD) (PI) (P)

Dr. Wilburn Shannon, Supt.
Kirkwood Public Schools
Kirkwood, Missouri
(PD) (PI) (P)

Dr. Warren M. Brown, Supt.
Ferguson R.II School District
Ferguson, Missouri
(PD) (PI) (P)

Dr. Pat Henderson, Supt.
Wilson School District
Phoenix, Arizona
(PD) (PI) (P)

Dr. Harold Spears, Professor and Consultant
College of Education
Indiana University
Bloomington, Indiana
(PD) (T) --Former Supt. of San Francisco, California

Dr. William Waggoner, President (Used for Professional Association)
Wilmington College
Wilmington, North Carolina --Former Supt. , New Hanover Co., N. C.

Mr. Julian Prince, Supt.
McComb Municipal School District
McComb, Mississippi
(D) (PD) (PI) (PE) (P)

Dr. James V. Moon, Supt.
J. S. Morton Township School District
2423 Austin Blvd.
Cicero, Illinois --Former Supt. of Rochester, Minn.
(PD) (PI) (P)

Dr. Earl A. McGovern, Supt.
Lima Ohio School District
Lima, Ohio
(PI) (T) (P)

General School Administration: (Cont.)

Dr. Ralph S. Owings, Dean
Graduate School
University of Southern Mississippi
Hattiesburg, Mississippi
(PD) (T)

Dr. Orin Graff, Director
Division of Educational Admin. and Supervision
College of Education
University of Tennessee
Knoxville, Tennessee
(PD) (PI) (T)

Dr. Milton Ferguson, Dean
College of Education
Louisiana State University in New Orleans
Lake Front, New Orleans, Louisiana
(PD) (PI) (T)

Dr. J. B. White, Executive Secretary
Florida Educational Research and Development Council, Inc.
Florida University
Gainesville, Florida
(PD) (PI) (T)

Dr. Charles O. Rickter, Supt.
West Hartford Public Schools
West Hartford, Conn.
(D) (PD) (PI) (P)

Mr. G. B. Wazeck, Supt.
San Angelo Public Schools
San Angelo, Texas
(PD) (PI) (P)

Mr. James Cherry, Supt.
DeKalb County Georgia
Decatur, Georgia
(PD) (PI) (PE) (P)

Dr. Max Abbott, Director
Research and Development Center for School Admin.
University of Oregon
Eugene, Oregon
(D) (PD) (PI)

Dr. John Albohm, Supt.
Alexandria Public Schools
Alexandria, Virginia
(D) (PD) (PI) (PE) (P)

General School Administration: (Cont.)

Dr. Ralph S. Owings, Dean
Graduate School
University of Southern Mississippi
Hattiesburg, Mississippi
(PD) (T)

Dr. Orin Graff, Director
Division of Education Administration and Supervision
College of Education
University of Tennessee
Knoxville, Tennessee
(PD) (PI) (T)

Dr. Milton Ferguson, Dean
College of Education
Louisiana State University in New Orleans
Lake Front, New Orleans, Louisiana
(PD) (PI) (T)

Dr J. E. White, Executive Secretary
Florida Educational Research & Development Council, Inc.
Florida University
Gainesville, Florida
(PD) (PI) (T)

Dr. Charles O. Rickter, Supt.
West Hartford Public Schools
West Hartford, Conn.
(D) (PD) (PI) (P)

Mr. G. B. Wazeck, Supt.
San Angelo Public Schools
San Angelo, Texas
(PD) (PI) (P)

Mr. James Cherry, Supt.
DeKalb County Georgia
Decatur, Georgia
(PD) (PI) (PE) (P)

Dr. Max Abbott, Director
Research and Development Center for School Admin.
University of Oregon
Eugene, Oregon
(D) (PD) (PI)

Dr. John Albohm, Supt.
Alexandria Public Schools
Alexandria, Virginia
(D) (PD) (PI) (PE) (P)

Dr. Calvin Gross, Dean
College of Education
University of Missouri at Kansas City
Kansas City, Missouri
(D) (PD) (T) (P) --Former Supt. of New York City

Dr. Hollis A. Moore, Vice President
George Peabody College
Nashville, Tennessee
(D) (PD) (T)

Dr. Jack Culbertson, Executive Director
University Council for Educational Admin.
29 Woodruff Avenue
Columbus, Ohio
(D) (PD) (T)

General Curriculum Development:

Dr. Paul Halverson, Professor
Division of Curriculum and Instruction
College of Education
University of Georgia
Athens, Georgia
(PD) (T)

Dr. David Cunningham, Professor
College of Education
University of Southern Mississippi
Hattiesburg, Mississippi
(D) (PD) (PI) (PE) (P)

Mrs. Terresa Howard, Director
Division of Curriculum Development
Wilson School District
Phoenix, Arizona
(D) (PD) (PI) (PE) (P)

Dr. Martin McCullough, Associate Professor
Division of Curriculum and Instruction
College of Education
University of Georgia
Athens, Georgia
(PD) (PI) (P)

Dr. Ralph White, Chairman
Division of Education
Middle Tennessee State University
Murfreesboro, Tennessee
(PD) (T)

Mr. John Givens, Program Director
Division of Curriculum
San Angelo Public Schools
San Angelo, Texas
(PD) (PI) (P)

Dr. Edward Eaton, Consultant
Educational Development Division
Eastman Kodak Corporation
Rochester, New York
(D) (PD) (PI) (T) (P)

Dr. Robert Purvis, Curriculum Director
Norman Public Schools
Norman, Oklahoma
(PD) (PI) (PE) (P)

Mrs. Kaye Lubbel, Director
Nova School
Ft. Lauderdale, Florida
(PD) (PI) (P)

Mrs. Bea Williams, Curriculum Director
Broward County School District
Ft. Lauderdale, Florida
(PD) (PI) (P)

Mrs. Nita Nardo
Curriculum Division and Bureau of Information
Chattanooga Public Schools
Chattanooga, Tennessee
(D) (PD) (P)

Mrs. Ann Fluit, Assistant Director (Elementary Curriculum)
Division of Student Teaching
College of Education
Louisiana State University
Lake Front, New Orleans, Louisiana
(PD) (PI) (PE) (P)

Educational Data Processing:

Dr. John Van Dusseldorp, Director
Iowa Data Informational Center
Iowa City, Iowa
(D) (PD) (PI) (P) (T)

Mr. Julian Prince, Supt.
McComb Municipal School District
McComb, Mississippi
(PD) (PI) (PE) (P)

Mr. Robert Lambuth, Assoicate Supt.
McComb Municipal School District
McComb, Mississippi
(D) (PD) (PI) (PE) (P)

Mr. Roy Holt, Director
Division of Accounting and Data Processing
Memphis Public Schools
Memphis, Tennessee
(PD) (PI) (PE) (P)

Dr. Donald Bitzer, Director
Computer Based Education Research Laboratory
University of Illinois
Urbana, Illinois
(D) (PD) (PI) (PE) (T)

Reading: Language Arts

Dr. Marie Marcus, Assoicate Professor
College of Education
Louisiana State University in New Orleans
Lake Front, New Orleans, Louisiana
(D) (PD) (PI) (T) (P)

Mrs. Alica HIll, Consultant
Division of Instruction
Tennessee State Department of Education
Nashville, Tennessee
(PD) (PI) (P)

Mrs. Mattie Crosley, Specialist Secondary Language Arts
Memphis City Schools
Memphis, Tennessee
(PD) (PI) (P)

Dr. Elizabeth Antley, Assoicate Professor
College of Education
University of Arizona
Tuson, Arizona
(PD) (PI) (T) (P)

Dr. S. Alan Cohen, Professor and Director
Reading & Language Arts Center, Ferkauf Graduate School
Yeshiva University
55 Fifth Avenue
New York, New York

Educational Philosophy

Dr. Charles Glatt, Associate Professor
Faculty of Educational Development
College of Education
Ohio State University
Columbus, Ohio
(PD) (T) (P)

Dr. Frank W. R. Hubert, Dean
College of Liberal Arts
Texas A and M University
College Station
Bryan, Texas
(PD) (T) (P) -- Former Supt. Orange, Texas

Dr. Ralph White, Chairman
Division of Education
Middle Tennessee State University
Murfreesboro, Tennessee
(PD) (T) (P)

Dr. Joseph Taylor, Director
Indiana University Regional Campus
Indianapolis, Indiana
(PD) (T)

Educational Philosphy (Continued)

Dr. Carl Kreisler, President
Parsons College
Fairfield, Iowa
(PD) (T)

Dr. John Fluit, Associate Professor
College of Education
Louisiana State University in New Orleans
Lake Front
New Orleans, Louisiana
(PD) (T) - Cultural Anthropoly Basis

Extended - ReScheduled School Year

Dr. James V. Moon, Superintendent
J. S. Morton Township School District
2423 Austin Blvd.
Cicero, Illinois
(D) (PD) (PI) (PE) (P)

Dr. Frank King, Superintendent
Rochester Minnesota Public Schools
Rochester, Minnesota
(D) (PD) (PI) (PE) (P)

Dr. George Thomas, Special Consultant
University, State of New York
New York State Department of Education
Albany, New York
(D) (PD) (T)

Evaluation of Pupil Growth and Development

Dr. William Anderson, Dual Professor
College of Liberal Arts and College of Education
Syracuse University
Syracuse, New York
(D) (PD) (PE) (T) (P)

Dr. Warren Finley, Director
Research and Development Center for Educational Stimulation
College of Education
University of Georgia
Athens, Georgia
(D) (PD) (PI) (PE) (T)

Evaluation of Pupil Growth and Development (Continued)

Dr. A. D. Nelson, Assistant Director
South Central Regional Educational Laboratory
Old Line Insurance Bldg.
Little Rock, Arkansas
(D) (PD) (PI) (T) (P)

Dr. S. Alan Cohen, Professor and Director
Reading and Language Arts Center, FerKauf Graduate School
Yeshiva University
55 Fifth Avenue
New York, New York

Dr. William Katzenmeyer, Professor
College of Education
Duke University
Durham, North Carolina
(D) (PD) (PI) (PE) (T) (P) - (Computer Program for same above)

Computerized Flexible Modular Scheduling:

Dr. Lowell Thompson, Professor
College of Education
Brigham Young University
Provo, Utah
(D) (PD) (PI) (PE) (P)

Non Graded Programs: Elementary

Dr. Martin Power, Principal
Sebastian Roy Elementary School K-4
Reggio, Louisiana
(PD) (PI) (PE) (P)

Dr. Edward Eaton, Consultant
Educational Development Division
Eastman Kodak Corporation
Rochester, New York
(D) (PD) (PI) (PE) (P) (T)

Mrs. Kaye Killough, Principal
Matzke Elementary School
Cyprus, Texas
(PD) (PI) (PE) (P)

Mrs. Bobbie Sheridan, Assistant Principal
Matzke Elementary School
Cyprus, Texas
(PD) (PE)(PI) (P)

Non Graded Programs: Elementary (Continued)

Dr. Marie Marcus, Associate Professor
College of Education
Louisiana State University
Lake Front
New Orleans, Louisiana
(D) (PD) (PI) (PE) (T) (P)

Dr. David Cunningham, Professor
College of Education
University of Southern Mississippi
Hattiesburg, Mississippi
(D) (PD) (PI) (PE) (T) (P)

Miss Maude Bergeron, Principal
Lacoste Elementary School K-4
1100 East Goodchildren St.
Chalmette, Louisiana
(PD) (PI) (PE) (D)

Mrs. Bea Williamson, Curriculum Director
Broward County Schools
Ft. Lauderdale, Florida
(PD) (PI) (PE) (P)

Administrative Staff Development (Sensitivity Training)

Dr. Allan B. Drexler, Executive Director
Cincinnati Speech and Hearing Center
3006 Vernon Place
Cincinnati, Ohio
(D) (PD) (PI) (PE) (T) (P)

Dr. Dorthy Mials, Director
NTL Institute For Applied Behavorial Science
1201 Sixteenth St. N.W.
Washington, D. C.
(D) (PD) (PE) (P) (T)

Individualizing Instruction

Dr. Edward Eaton, Consultant
Educational Development Division
Eastman Kodak Corporation
Rochester, New York
(D) (PD) (PI) (T) (P)

Dr. Robert Purvis, Curriculum Director
Norman Oklahoma City Schools
Norman, Oklahoma
(PD) (PI) (PE) (P)

Individualizing Instruction (Cont.)

Mrs. Kaye Killough, Principal
Matzke Elementary School
Cyprus Fairbanks School District
Cyprus, Texas
(PD) (PE) (PI) (P)

Dr. David Cunningham, Professor
College of Education
University of Southern Mississippi
Hattiesburg, Mississippi
(D) (PD) (PI) (PE) (P) (T)

Mrs. Kaye Lubell, Director
Nova School
Ft. Lauderdale, Florida
(PD) (PI) (PE) (P)

Mrs. Bobbie Sheridan, Assistant Principal
Matzke Elementary School
Cyprus Fairbanks School Diatrict
Cyprus, Texas
(PD) (PI) (PE) (P)

Mr. Jack Null, Acting Superintendent
Wilson School District
Phoenix, Arizona
(PD) (PI) (PE) (P)

Mrs. Alice Bromley, Classroom Teacher
Wilson School District
Phoenix, Arizona
(PD) (PI) (PE) (P)

Educational Facilities

Dr. James MacConnell, Director
Regional Center For School Facilities
Stanford University
Palo Alto, California
(D) (PD) (PI) (PE) (T) (P)

Dr. John Guilland, Director
Southern Regional Center for School Facilities
College of Education
University of Tennessee
Knoxville, Tennessee
(D) (PD) (PI) (PE) (T) (P)

Mr. Joseph J. Davies, Supt.
Parish of St. Bernard
Chalmette and Lacoste Sts.
Chalmette, Louisiana
(PD) (PI) (PE) (P)

Educational Facilities (Cont.)

Mr. Edwin Howard, Director
School Facilities Planning Division
Chattanooga Public Schools
Chattanooga, Tennessee
(D) (PD) (PI) (PE) (P)

Dr. Ralph S. Owings, Dean
Graduate School
University of Southern Mississippi
Hattiesburg, Mississippi
(PD) (PI) (PE) (T) (P)

Mr. G. B. Wadzeck, Supt.
San Angelo Public Schools
San Angelo, Texas
(PD) (PI) (PE) (P)

Dr. Charles E. Martin, Regional Area Commissioner
U. S. Office of Education
Room 406
226 West Jackson Blvd.
Chicago, Illinois
(PD) (PI) (PE) (P)

Mr. Robert Blanchard, Director
Division of School Plants & Facilities
Parish of St. Bernard
Chalmette and Lacoste Sts.
Chalmette, Louisiana

Dr. R. L. Johns, Director
Division of Educational Administration
College of Education
University of Florida
Gainesville, Florida
(D) (PD) (PI) (PE) (T)

Dr. Kern Alexander, Assoicate Professor
College of Education
University of Florida
Gainesville, Florida
(D) (PD) (PI) (PE) (T)

Mr. Louis Ruiz, Director
Division of Business Affairs
Parish of St. Bernard
Chalmette and Lacoste Sts.
Chalmette, Louisiana

Grade Level Organization: Middle School Structure

Mr. Walter Pagels, Principal
Barrington Middle School
Barrington, Illinois
(PD) (PI) (PE) (P)

Grade Level Organization: Middle School Structure (Continued)

Mrs. Marie Luquet, Principal
Arabi Park Middle School
Arabi, Louisiana
(PD) (PI) (PE) (P)

Dr. Herbert Reese
Director of Instruction and Curriculum
Columbus Indiana Public Schools
Columbus, Indiana
(D) (PD) (T) (P)

Mr. Buford Jones, Associate Superintendent
Parish of St. Bernard
Chalmette and Lacoste Sts.
Chalmette, Louisiana
(PD) (PI) (P)

Professional Negotiations

Dr. Earl McGovern, Superintendent
Lima Public Schools
Lima, Ohio
(PD) (P)

Dr. Joseph Cronin, Professor
Graduate School of Education
Harvard University
Cambridge, Massachusetts
(D) (PD) (PI) (PE) (T)

Mr. Joseph L. Murphy, Vice President
Amercian Arbitration Association
140 West 51st St.
New York, New York
(PD) (T) (D)

Mr. Dutch Holland, Teacher
Brichta School
1501 N. Silverbell
Tuscon, Arizona
(D) (PD) (PI) (PE) (P)

Mr. Allen Sayer, Teacher
Phoenix, Arizona
Phoenix High School
(D) (PD) (PI) (PE) (P)

Special Areas

Mr. David Engler, General Manager & Vice Pres.
Instructional Systems Division
McGraw-Hill Book Company
330 West 42nd St.
New York, New York
* Educational Projections, General Program Designs, Utilization of Materials

Mr. William Smith, Director
Bureau of Research and Development
Chattanooga Public Schools
Chattanooga, Tennessee
* Design Person for Drafting Proposals -- Idea Man

Dr. George Redfrem, Assistent Secretary
American Association of School Administrators
NEA
Washington, D. C.
* Administrative Organizations at local, state, and national level

Dr. Charles Glatt, Associate Professor
Faculty of Educational Development
College of Education
Ohio State University
Columbus, Ohio
* Social Demographer-- Studies population shifts, etc., in terms of social structures

Mrs. Maunelle Martin, Director
Auxillary Personnel Development Program
Mesa Community College
1833 West Southern Avenue
Mesa, Arizona
* Team Teaching, Utilization of Teacher Aides, Secondary Language Arts

THE 9 WEEK SEMESTER HIGH SCHOOL:
AN INTERNAL SUPPORT SYSTEM MODEL
FOR SECONDARY EDUCATION

36

INTRODUCTION:

The American high school is a unique organization and one that is attempting to provide the future citizenry of the nation a reasonable opportunity to enter into the mainstream of our societal structure. The high school is the one educational agency charged with the greatest responsibility to prepare the on-coming generation for a productive adult life. The high school is thought to be an educational agency that provides each learner the expanded opportunity to develop a personal skill bank wherein the individual is capable of entering a complex technolized society to the extent that he or she is self supporting and receptive to operating in an organized structure.

Those concerned with the operation of the high school as a support system that increases the students chances of productivity must continuously analize the internal structure of the agency in terms of the following questions:

1) Is the teacher-pupil relationship such that the teacher is provided a reasonable chance to understand and capitalize on the students strengths, weaknesses, aspirations, and potential?
2) Is the school day and year organized in such a manner that the learner can utilize time, materials, space, and personnel to increase his own skill bank for a productive adult life?
3) Are people, time, space, and materials organized in such a manner that the learner feels they are working for his own improvement as an individual wherein he can gain self-recognition and self esteem?

This document attempts, in very brief form, to relate to those concerned with secondary school organizational structure hwo the 9 week semester high school can serve as an internal support system for secondary school learners. The author recognizes that the information in this document is an attempt to internally change the organizational structure wherein a form of modular scheduling can promote a different educational climate and improve the following:

1) The time sequence a student at the secondary level can spend with a teacher and enhance the possibility of improving the teacher-pupil relationship, the pupil-pupil relationship, and allow the student to gain self esteem.
2) The time a student normally spends in preparing homework, lesson assignments, and conducting in-depth inquiry activities concerning the solving of problems.
3) The utilization of instructional materials and supplies.
4) The utilization of space for learning.
5) The pupil-teacher lead normally found in most high schools today.
6) The promotion of independent study, individualized instruction, team teaching, and small group activity.
7) The time sequence in which the high school student can enter and leave the school program each year.
8) The promotion of a better time sequence to allow for more productive teacher planning and teacher-learner planning.
9) The promotion of released time and sabbatical leave for teachers for their professional growth.
10) The utilization of intern teachers, teacher aides, and para professionals
11) The promotion of nongraded secondary school program.
12) The utilization of both internal (school) and external (community) laboratory learning experiences on the part of the learner and teacher.

On page 39 a diagram is presented outlining how an entering freshman might be scheduled for one year under the 9 week semester school. On page 40 a diagram is presented outlining an English teachers schedule operating under a 9 week semester school.

THE 9 WEEK SEMESTER HIGH SCHOOL

* Entering Freshman Schedule

1st Semester		2nd Semester		3rd Semester		4th Semester	
8:00 to 9:30	English 35 students	8:00 to 9:00	Health & P.E.	8:00 to 9:30	Science	8:00 to 9:00	Art
9:30 to 10:30	Health & P.E.	9:00 to 10:30	Math	9:30 to 10:30	Art	9:00 to 10:00	Social Studies
10:30 to 11:30	English	10:30 to 11:30	Math	10:30 to 11:30	Science	10:00 to 11:30	Social Studies
11:30 to 12:00	Lunch	11:30 to 12:30	Foreign Language	11:30 to 12:00	Lunch	11:30 to 12:30	Foreign Language
12:00 to 1:00	Foreign Language	12:30 to 1:00	Lunch	12:00 to 1:00	Science	12:30 to 1:00	Lunch
1:00 to 2:00	English	1:00 to 2:00	Math	1:00 to 2:00	Foreign Language	1:00 to 2:00	Social Studies
2:00 to 3:00	Music	2:00 to 3:00	Music	2:00 to 3:00	Music	2:00 to 3:00	Music

9 WEEK SEMESTER PLAN: ONE ENGLISH TEACHER'S SCHEDULE FOR FIRST 9 WEEKS

8:00 to 9:30	35 Freshman Students
9:30 to 10:30	20 Freshman Students
10:30 to 11:30	15 Freshman Students
11:30 to 12:00	Lunch
12:00 to 1:00	20 Freshman Students
1:00 to 2:00	15 Freshman Students
2:00 to 3:00	10 Freshman Students

The freshman English teacher under the 9 week schedule would handle only 35 students each day. Her peak load would be 35 and fluxuate downward to as few as 10 students. The teacher handles the same 35 students each day.

The English student should under the 9 week schedule, operate in a climate wherein the teacher would probably use the "lecture informational in-put" managerial technique during her peak load period. After the "peak load" module has been completed, the teacher and student would move to a planning arrangement, team learning, independent inquiry or some other plan than that found in the "peak load" module.

The teacher under the 9 week plan has one content preparation, fewer students per day, more opportunities to establish a working relationship with students.

OPERATIONAL DEFINITION OF DIAGRAM NUMBER ONE:

Under the 9 week semester plan, each student would take one of the "solid Four" - English, Math, Science, and History for one 9 week period during the year. In a high school of 400 students, each student could select the semester he or she takes a particular "solid." A review of diagram #1 reveals that the student would participate in one "solid subject: class in one 1½ hour time module; and yet, a student could remain in the one class up to 3½ hours straight. The length of continuous time the sudent spends in the solid each day is a matter of individual choice and scheduling.

A further review of diagram # 1 reveals that for a 9 week period the teacher will have during the 1½ hour time module a "peak load" of 35 students. Other than that "peak load" time module, the student-teacher ratio will fluxuate downward. For instance, in diagram #1, from 9:30 to 10:30 a.m. in the first semester perhaps 15 students would leave the English class and 20 remain; thus the teacher-pupil ratio is changed from 35 to 20. From 9:30 to 10:30, the teacher has 20 of the same students that she had from 8:00 to 9:30. The time sequence the teacher spends with those 20 - during the time from 9:30 to 10:30- would indicate that the teacher would probably manage the class in terms of small group activity, team learning, independent study, in-depth inquiry or at least utilize some "managerial arrangement' method other than the "lectur-informational input" scheme or technique.

Analyzing diagram #1 and #2 in terms of improving the areas referred to earlier, the 9 week semester plan should provide the following:

1) The time sequence the student spends with the teacher and other learners should be improved to permit a more productive teacher-pupil, pupil-pupil relationship. Teacher and student spend 3½ hours per day together.

The teacher, after her "peak load" can move to a personalized managerial arrangement with the learner and plan individually with the student, promote and direct in-depth inquiry on the part of the student, work with and manage smaller groups, promote team learning, and above anything else, promote personalized interaction between students. Under the 9 week plan the teacher should, after the "peak load" time block period, become a manager of learning activities planned largely by the learner. One-on-one learning situations and the sharing of experiences should be better provided for under the 9 week plan than under a traditional program. Students could gain self recognition and greater self esteem.

2) The time a student normally spends in preparing lesson assignments, homework, and conducting in-depth inquiry activities concerning the solving of problems should be improved. A review of diagrams #1 and #2 reveals that the student has only one " solid subject" a day to contend with, one home preparation, and thus is provided greater opportunity to utilize teacher expertise and peer assistance in analyzing concepts introduced during the "peak load" module. Under the 9 week plan the student should be able to work "in-depth" in one area on a more reasonable basis. Study halls are eliminated. Students should be able to plan work better.

3) The utilization of instructional materials and supplies should be improved. Through the time sequence offered in the plan, the teacher should introduce concepts and use the information dissemination technique during the "peak Load" period. During the remainder of the day, the 35 students should have greater opportunity to use the instructional materials available and pertaining to the "solid area" at an increased rate. Utilization of materials in the 9 week plan would now mean that the student becomes more familiar with those instructional materials available as the teacher-pupil relationship changes and the student begins to plan with the teacher according to the

former's weaknesses, strengths, aspirations, etc. Also during the 9 week period, each student would have to purchase only those "texts" in one basic area. Text book costs should decrease.

4) The utilization of space for learning should be improved. Most high schools 10-15 or 20 years old are "box type" in design and built for a class load of 30 to 40 students per class. Under the 9 week plan, the student load in a class would change and each classroom in the "solid four" areas should become a real learning center because of a greater input of materials which are utilized in independent study and in in-depth inquiry. Under the 9 week plan it seems reasonable to assemble each basic staff in one of the "solid four" areas should become a real learning center because of a greater input of materials which are utilized in independent study and in in-depth inquiry. Under the 9 week plan it seems reasonable to assembel each basic staff in one of the "solid four" areas together and promote the use of existing space for learning karels, material shelves, reasearch areas, etc. Space could be utilized in terms of area learning centers and resource materials decentralized and placed in each center. Older buildings could be renovated to use space for the accomodation of the above.

5) The pupil-teacher load normally found in high schools today should be improved. The NEA recently reported that the mean student load per teacher per day in our high schools is 132 students. Under the 9 week plan, as shown in diagrams #1 and #2, the "peak load" the English, Math, Science or History teacher would have per day would be 35. Under the 9 week plan the 35 could represent a "tighter-group" according to interest, ability, or achievement. Grading, testing, counseling, bookkeeping responsibilities for the teacher should be improved under the 9 week plan.

6) The opportunities for independent study, individualized instruction, team learning, team teaching, and small group activity should be improved. Teachers operating under a traditional schedule are hard pressed to promote a "learning environment" wherein any of the above "managerial techniques" can be productively implemented. During the "peak load" the teacher will probably want to make her "pitch" or presentation; after the 1½ hour time module student flow in and out of the class will vary and thus the teacher should be forced to change her role. After the "peak load" time module the teacher should allow the students to "team up" and work on individual assignments, etc. Students may want to work on their own. Also, if a teacher is to develop "learning action packets" on an individualized basis, it is doubtful they can do same if they have 135 students to contend with each day. However, the teacher might be able to prepare "LAP'S" for 35 students. Furthermore, team teaching should be better accomodated when two teachers have their "light load" period. This should hold true within a discipline or when teaming across subject matter lines.

7) The times students can enter or leave the school program during the year should be improved. A lot of lip service and studious activity on the part of educators is presently being directed toward the concept of the "extended school year," "year round schools," 4 quarter plans, and the rescheduled school year, etc. Under the 9 week plan it becomes possible to "tack on" another 9 week semester and permit the student the opportunity to enroll in any 4 of the 5 semesters offered. If the student wants an accelerated program, he or she could attend all 5 semesters in one year. The real strength of the 9 week plan in regard to entrance of students would be found if all secondary schools were implementing the plan. If the latter were true, the student entering school in the middle of a 9 week semester would have only one solid subject to

contend with when transferring. The receiving teacher would have a better "time sequence" and pupil-load sequence in which to determine the strengths and weaknesses of the student.

8) Teacher planning and teacher-pupil planning should be more porductive under the 9 week semester plan. How can a high school teacher plan for 135 students per day? How can the teacher, if he or she teaches 3 different shbject class areas a day, contend with the explosion of knowledge? In a 55 minute, 6 period a day school, where does the teacher have time to plan with students? Under the 9 week plan the teacher has one preparation to make. After the "peak load" module has been met each day, the teacher should move into pupil-teacher planning sessions on a meaningful basis. Through planning, the establishment of agreed upon goals, agreed upon procedures, etc., the teacher has a greater opportunity to humanize his or her relationships with students. The traditional high school schedule probably contributes as much to the "dehumanization" and alienation" of students as any one organizational factor operating in our present educational structure. Under the 9 week plan the studetn shouldn't have to "vie" for a teachers time, it should be readily available on a consistent basis. Also, under this plan, the principal, supervisor, and other administrative personnel should better be able to ascertain which teachers possess the more functional human relations skills in dealing with students.

9) Teachers should have a better opportunity for the procurement of released time and sabbatical leave. The author has scheduled a high school with an enrollment of 800 students utilizing the 9 week model and discovered that it is not necessary for the entering freshmen to schedule all four solids during their first year. Mathematically the above is possible; thus, for hypothetical purposes, a freshman English staff for a given year could be

provided released time or sabbatical leave to improve curriculum content, visit other schools, or attend college. The author knows of few internal organizational support systems presently in operation that provide the above opportunity.

10) Intern teachers, teacher aides, and para professionals should be better utilized under the 9 week semester school. A review of the freshman schedule presented in diagram #1 reveals that the teacher is scheduled to teach from 8 through 3. In actuality, if teacher aides or interns are available in a school, the teacher would merely schedule one of the above into her class during one of the periods other than the "peak load" period. Teacher aides would be scheduled into periods for individualized work with smaller groups. In a high school of around 800 student enrollment, one (1) aide for each of the 4 "solid subject" staff should provide ample daily released time for the instructional staff. "Intern teachers or student teachers" operating under the 9 week plan would conceivable be provided a better opportunity to become familiar with the managerial aspects of independent study, small group activity, individualized-personalized instruction, teacher-pupil planning etc. Contiguous with the aforementioned, the author is of the opinion that the 9 week semester plan provides the teacher greater opportunity to become professionalized because a more meaningful working relationship through planning with colleagues and students can be implemented.

11) A nongraded continuous progress plan can be implemented more effectively under the 9 week semester plan. If after 9 weeks a student has not progressed satisfactorily, the student would be rescheduled the following 9 weeks in the same subject during periods other that the "peak load" time module offered in the subject the student displayed poor progress. If after

the second 9 weeks the student displayed satisfactory progress, he or she would have completed their requirements for that subject. Thus, continuous progress would be in evidence. Also a student enrolled in a high school of approximately 800 up, he or she could select the 9 week semester they wanted to take a certain solid subject. In a high school of 800 or above, if the student wanted to and the school were very innovative, the student should be provided the opportunity to take one required solid during two (2) 9 week semesters in the same year. For instance, why couldn't a student complete freshman and sophomore English the first two 9 weeks of his or her freshman year. Correspondingly, if the school organizational structure were designed to really support the student, the student should be able to take their "strongest suit" or that subject they can perform best in during the 9 week period they have the greatest responsibility external to the school program. Thus the football player would, during football season, take the "solid subject" he is strongest in. The student, operating under the 9 week semester plan could, if he or she had enough credits, leave school for good after the first 9 weeks, or the 2nd, or 3rd nine weeks of their senior year.

12) The student and teacher should utilize more laboratory experiences within the school and utilize community resources at a higher rate. After the "peak load" period, the student should be moved into independent arrangements to better acquire inquiry skills, acquire exploration techniques, participate in team learning exercises, and operate in field experiences, etc. Schools that have implemented programs featuring independent study - individualization, etc., report a greater flow of student participation in utilizing the total environment for learning. It is the opinion of the author that when students utilize the total environment, the teacher will neces-

sarily become receptive in utilizing "monitoring systems" of teacher performance. Accepting the above assumption, the teacher operating in the 9 week plan and utilizing a "peak load" module should be more receptive to using a "monitoring system" of teacher performance such as interaction analysis during that peak load period. Also, if the 9 week model provides for more planning, a reduced teacher-pupil load, and a higher degree of utilization of community resources, the chances are that the teacher will be forced to depend on techniques of "Class management" based in the behavioral science field. If teachers are forced to operate differently through the utilization of a time sequence, then they should better be able to see the need to use different teaching techniques.

SUMMARY:

Time, space, materials and teachers should be organized internally through a structural process to support the child's endeavor to gain a data bank of skills for a productive full life. The 9 week semester school offers those administratively responsible, the opportunity to provide the learner a more effective internal support system of organizational structure. The author contends that the 9 week semester school promotes an organization wherein the following improvements for learning can be realized.

1) An improved time sequence that promotes the opportunity for a more humanized productive teacher-pupil relationship and peer group relationship.

2) An improved opportunity for the student to realistically handle homework, lesson assignments, and acquire inquiry and research skills for problem solving.

3) An improved utilization of instructional materials and supplies.

4) An improved utilization of space.

5) A more manageable pupil-teacher load.

6) The opportunity to effectively implement independent study, individualized instruction, personalized instruction, team learning, team teaching, and small group activity.

7) More realistic opportunities for students to enter into and leave the secondary learning program.

8) Greater opportunities for teacher planning and teacher-pupil planning.

9) Greater provision for teachers to secure released time and sabbatical leave for curriculum development, program visitation, and professional training at institutions of higher education.

10) More productive use of teacher aides, intern teachers, and para professionals.

11) The opportunity to implement a nongraded continuous progress plan.

12) The opportunity for the staff and learners to utilize a variety of internal and external laboratory experiences for learning.

The nine (9) week semester secondary school should not prove to be expensive. To the author's knowledge, two school districts have used or are now implementing the plan; one is in Kentucky and one is Mississippi.* The plan does not assume that the carnegie unit is sacred. The plan does not assume that schools have to operate on a traditional basis. Students and teachers need a "new deal"; they need a structure that works for them as both attempt to use the organization to accomodate learning and maturity.

* The two districts are: The Cloverport Kentucky Independent School District and the McComb, Mississippi City School District

If educators truly recognize and admit that the present structure possibly "dehumanized" and restricts productive interaction between student and teacher, then they will consider a new organizational structure. Students can operate differently; teachers can better teach 35 students a day than they can 135 students per day. Beyond any other consideration, the administrator must finally recognize that the organization in terms of time, personnel, materials and space, operates on behalf of the learner and not for the sacredality and perpetuation of the same old house!

A PROPOSED EDUCATIONAL DELIVERY SYSTEM FOR THE STANLEY AND MACEO ELEMENTARY SCHOOLS IN DAVIESS CO. KENTUCKY

SUBMITTED TO:

Mr. Fred Taylor Burns, Supt.
Daviess County, Kentucky
School District

SUBMITTED BY:

The Title III ESEA Project
To Improve the Administration
and Management of the Curriculum
in Kentucky.

Dr. Morris Osburn, Project Director
of the Shelby County Project

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1. INTRODUCTION

Individualized instruction has been receiving lip service for years. Many educators have attempted solutions for the above by designing new organization structures and instructional schemes ranging from continuous progress programs to departmentalization to team teaching, or combinations thereof. Many of these efforts have stopped after the envisioned implementation of a new organizational structure.

The Stanley and Maceo Elementary School hopefully will provide a productive individualized approach to learning. To accomplish the above long range goal, it is envisioned that students presently enrolled in grade 2 through 6 will receive instruction more nearly commensurate to their level of ability and achievement. Teachers will be assigned to operate in a team teaching situation designed to facilitate individualization of instruction and learning. Contiguously the program will insure the professionalization of the instructional staff.

2. PROPOSED OBJECTIVES OF THE STANLEY AND MACEO ELEMENTARY SCHOOLS

The objectives of the organizational and instructional concepts proposed are as follows:

1. Provide each student the opportunity of progressing at his own rate;
2. Afford each student more alternatives and the opportunity of not only working on his own level, but approaching his learning from a view dictated by his unique interests, abilities, and cognitive style;
3. Insure better utilization of teacher talents;
4. Develop curriculum materials applicable to an individualized instructional program;
5. Utilize and evaluate various types of media, both printed material and hardware, for students and teachers and;
6. Afford in-service training opportunities for teacher-trainees, teachers, administrators, and other interested persons.

3. STAFF ORGANIZATIONAL CONCEPT

Individualized learning will be facilitated by team teaching and a continuous progress program, both of which have existed in public education for several years. However, since there exists quite a diversity of concepts on team teaching and continuous progress programs, the concept proposed to be utilized in the Stanley and Maceo Schools are skeletally outlined below.

Team Teaching: There are several definitions and types of team teaching. However, the Daviess County School District's philosophy of team teaching is that realistically supports an instructional organization which allows teachers to plan, teach, and evaluate the progress of students. Thus, the teams of the Stanley and Maceo Schools will be organized as depicted below in Figure 1. Also a description of each of the roles illustrated in Figure 1 is provided below.

Principal (P)

The principal of both schools are charged with the responsibility to provide the leadership in curriculum development, resource studies, instructional supervision, and guidance. They should afford the leadership in the developmental and evaluative aspects of the program as well as providing faculty members with current research information helpful in the improvement of curriculum, teaching methods, and of school practices in general.

Team Coordinator (T.C.)

This person should be an experienced, mature teacher of unusual talent who has demonstrated the ability to work with teachers in a leadership role. She should possess the following skills and qualities:

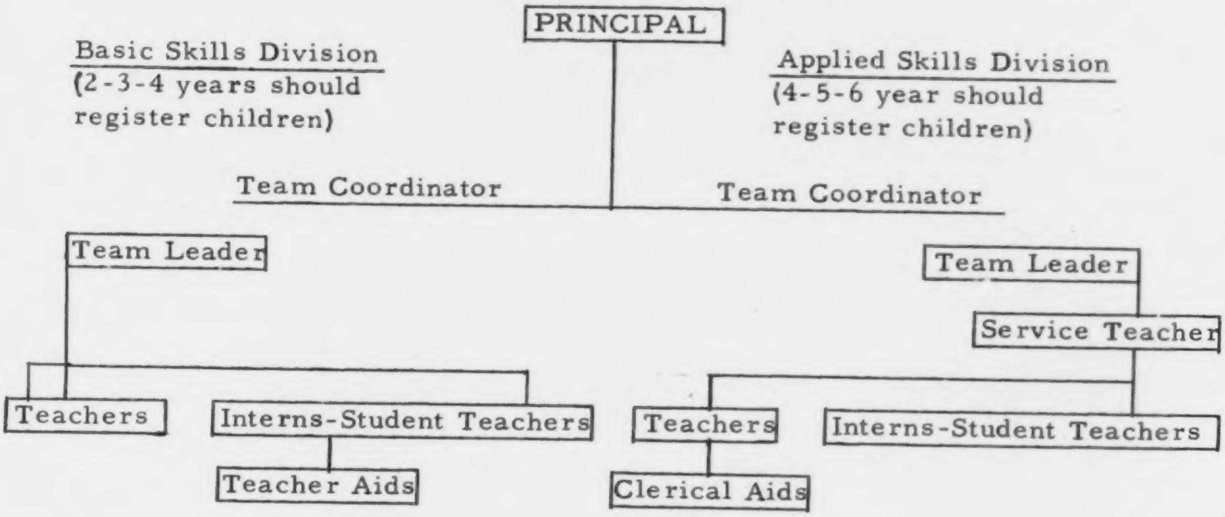
PRINCIPAL
Basic Skills Division
(2-3-4 years should register children)
Applied Skills Division
(4-5-6 year should register children)
Team Coordinator
Team Coordinator
Team Leader
Teachers
Interns-Student Teachers
Teacher Aids
Team Leader
Service Teacher
Teachers
Interns-Student Teachers
Clerical Aids

Figure 1 - The Team Structure For The Stanley and Maceo Schools

1. ability to relate the organizational structure proposed in the school;
2. quality of being considerate of others;
3. exceptional knowledge of the learning process and educational objectives;
4. talent in applying these skills and quality and in selecting appropriate leadership direction in specific situations.

The team coordinator's primary responsibility is to afford leadership in planning sessions, curriculum development, research and evaluation, parent-teacher relationships and provide the linkage system to the hierarchy of administration.

Team Leader

The experienced teacher should be a person that exhibits above-average talent comparable to the well-regarded stay-on teacher. In addition, she should possess a high degree of specialized competence in a particular area. Her primary responsibility is to afford human relationship leadership commensurate with her specialty.

Teacher (T)

This category includes both experienced teachers with general training and teachers of relatively little experience. This does not represent a terminal role as each staff member is expected to increase his professional competencies in specialized areas and serve as a team leader.

Intern (I) - Student Teacher

A trainee in a program of teacher education doing full-time supervised teaching. The work of the interns will be supervised by a Teacher or the Team Leader. Interns are expected to assume the role of a beginning teacher, with opportunities to observe experienced teachers; and the above should spend 95% of her time in actual teaching.

Teacher Aid (TA)

A mature person who enjoys working with children. She does not qualify as a certified teacher but works with children in limbo-instructional situations: also they will supervise recess, lunch periods, bus loading and unloading; operate mechanical teaching aids; assist in supervision in the Resource Center; and correct objective tests. Other tasks will be defined by each team.

55

Clerical Aide (CA)

This person assists with routine clerical tasks such as typing, duplicating, filing, and recording attendance.

The Principal, Team Leaders, and Teachers constitute an Instructional Committee for the constant evaluation of the total program.

Each teacher of the staff in both schools will be assigned an area or areas of specialization based upon her interests and proficiency. This does not advocate departmentalization since all reachers are expected to teach language arts, arithmetic, social studies, and science. Semi-departmentalization exists in music, art, physical education, Spanish, anthropology, economics, and sociology. It does imply that each member of the team should assume a greater responsibility for that area of the curriculum assigned, and she is expected to take the initiative in the preparation and planning of new units and, on occasions, provide in-service training for team members.

5. PROPOSED INSTRUCTIONAL CONCEPTS TO BE IMPLEMENTED

The basic instructional concept proposed does not require additional personnel, although it is certainly agreed that additional professional and nonprofessional personnel are advantageous. However, the basic reason herein, for team teaching is a effort to reduce duplication of teacher efforts by "redeploying" youngsters through a more refined grouping procedure and permitting vertical movement of youngsters without regard to traditional grade level barriers. Figure 2 depicts a traditional grouping procedure. Although figures 2 and 3 may reflect only one grade level, the ease of "crossing grade lines" through such a procedure is quite apparent and is proposed to be an implemented operational pattern in the Stanley and Maceo Schools.

TRADITIONAL GROUPING

Teachers	A	B	C	D
Groups	①	①	①	①
	②	②	②	②
	③	③	③	③

Figure 2 -- This type grouping indicates four teachers teaching the same grade level with three goups in each room. In such a situation

students are usually grouped into a high, average, and slow group.

Team Teaching Grouping

Teachers	Team of A, B, C, D
	12
	11
	10
	9
	8
	7
	6
	5
	4
	3
	2
	1

Figure 3 indicates that with the four teachers working cooperatively, twelve "levels" or groups are formed instead of three - thus, a narrower range of achievement within each group is apparent compared to the typical self-contained classroom show in

6. GROUPING PRACTICES

Youngsters will be grouped homogeneously by reading and placed in levels commensurate with their achievement. Although youngsters are grouped primarily according to achievement, each teacher is expected to be cognizant of the ability of each student, and if achievement and ability are significantly different, reasons for this span must be analyzed and experiences provided wherein children can achieve more closely to their ability level.

The following criteria should be utilized in the homogeneous grouping youngsters:

1. Mental Age (Chronological age X Intelligent Quotient)
2. Cumulative Records - past "grades", test results, etc.
3. Achievement and Aptitude Test Scores
4. Teacher Opinions

Thus, utilizing the above data, a more refined grouping procedure is assured.

Youngsters will be heterogeneously grouped in interest areas to insure a practical environmental student interaction. However, to insure a high degree of non-gradedness in the basic subjects, part of the instructional time will be spent with groups determined by students' interest, special knowledge, and proficiency.

Moreover, the multigrading of reading is transcended to the extent that youngsters do not have to progress through each level in sequence. He may, through diagnostic testing, progress more than one vertical level without progressing through each successive level.

It is hopefully apparent from the aforementioned grouping procedures that a true continuous progress or nongraded program requires a sequential, spiral curriculum. The staff of each school, over a period of time, will develop a curriculum which introduces the same concepts and/or skills at all levels with the degree of difficulty being determined by the maturation stage of each student's development. Units in atomic energy, economics, anthropology, and sociology will eventually be presented to all youngsters enrolled in both schools in the social studies, science-math and cultural arts centers.

7. SCHEDULING PROPOSALS

A differiented schedule is proposed to permit more flexibility of grouping and better utilization of teacher talents.

Figure 4 shows the proposed schedule for the Basic Skills Division in the Stanley and Maceo Schools. The Division includes 4 teachers and approximately 100 students. Therefore 12 levels are established with approximately 9 students operating at each level.

Figure 4

Stanley and Maceo Schools

Daily Schedule

For

The Basic Skills Division

8:00 to 8:15 OPENING CEREMONIES: Housekeeping Duties

	L. A. Center Levels 8-10-12	S. S. Center Levels 1-3-5	MA. Center Levels 2-4-6	Sci. Center Levels 7-9-11	
8:15 to 9:10	Language Arts Levels 8-10 Resource Center 12	Social Studies Levels 1-3-5	Math Levels 2-4-6	Science Levels 7-9-11	
9:15 to 10:05	Language Arts Levels 7-9 Resource Center 11	Social Studies Levels 8-10-12	Math Levels 1-3-5	Science Levels 7-2-4-6	
10:10 to 11:00	Language Arts Levels 2-4 Resource Center 6	Social Studies Levels 7-9-11	Math Levels 8-10-12	Science Levels 1-3-5	
11:00 to 11:15	Free Time	Free Time	Free Time	Free Time	
11:20 to 12:55 Lunch	Lunch	Lunch	Lunch	Lunch	
12:00 to 12:50	Language Arts Levels 1-3 Resource Center 5	Social Studies	Math Center Levels 7-9-11	Science Levels 8-10-12	Free Planning Levels 6-11
12:55 to 1:45	Language Arts Levels 12 6 Resource Center 10	Social Studies Level Open Schedule 1-3-5	Math Levels 2-4-6	Science Levels 7-9-11	
1:50 to 2:30	Language Arts Level 11 5	Interest Groups	Interest Groups	Interest Groups	

Legend: L.A. Center - Language Arts Center
S.S. Center - Social Studies Center
MA. Center - Mathematics Center
Sci. Center - Science Center

A brief explanation of the Basic Skills Division Schedule for the Maceo and Stanley Schools:

Please note that the teacher moves with the child from 8 o'clock in the morning to 12:55 in the afternoon. Then the schedule changes in that the children other than those in levels 12, 11, 6, and 5 can move to learning centers according to their own interests, or assigned centers for special work.

Teachers will specifically plan together from 2:30 to 3:00 p.m. and they can, of course, change the level a child is assigned at anytime they agree that a change is for the betterment of the child; however, the principal should approve the change. Children should not be moved to a level lower. Once each month the team must meet together and systematically review each child's progress. The team should inform both the principal of the above and post in their team planning room, a list as to what level each child is currently functioning. Figure 5 and 6 is an abbreviation report sheet indicative of the level each child is functioning at a given time and the progress each child experiences during a school year or a given period of time.

Figure 5

Level Tally Sheet

Date	Sept. 1	Date		Date	
Name	Level	Name	Level	Name	Level

Figure 6

Students Progressive Record by Levels

Date From Sept. 1 To	Date From To	Date From To	Date From To
me (All children in sic Skills Division) ist in alphabetical der) Level	Level	Level	

Each teacher in the Basic Skills Division of each school will assume the planning duties for their respective team in one specific area. What areas each single teacher will plan for must be a team decision. Each teacher should initially, at the outset of the school year, plan for the team in one area for at least a 9 week period. The team leader for the team should serve for a period of 9 weeks. The principal should work closely with each team. The team coordinator should serve for a year; in some cases only one semester.

Figure 7 shows a daily schedule for the applied skills area in the Stanley School and Figure 8 shows a daily schedule for the applied skills division for the Maceo School.

Figure 7

The Maceo and Stanley School - Daily Schedule
for the Applied Skills Division - Levels 13-24.

8:00 to 8:15	Language Arts at Home Base M Levels 20-22-24	Science Center Home Base tr Levels 19-21-23	Social Studies Home Base Levels 14-16-18	Math Center Home Base for 13-15-17
8:20 to 9:10	Language Arts Center - Level 20-22-24 Resource Center	Science Center Levels 19-21-23	Social Studies Level 14-16-18	Math Center 13-15-17

9:15 to 10:05	Language Arts Center - Level 13-15 Resource Center 17	Science Center Levels 20-22-24	Social Studies Center - Levels 19-21-23	Math Center Levels 14-16-18
10:10 to 11:00	Language Arts Center-Levels 14-16 Resource Center 18	Science Center Levels 13-15-17	Social Studies Levels 20-22-24	Math Center Levels 19-21-23
11:00 to 11:15	Free Time	Free Time	Free Time	Free Time
11:15 to 12:00	Language Center Levels 19-21 Resource Center 23	Science Center Levels 14-16-18	Social Studies Center - Level 13-15-17	Math Center Levels 20-22-24
12:00 to 12:30	Lunch	Lunch	Lunch	Lunch
12:40 to 1:30	Language Arts Center - Level 24 17 Resource Center 20	Interest Science Levels 22-19-21	Interest Social Studies Levels 14-16-18	Math Center Levels 13-15-23
1:30 to 2:30	Language Arts Levels 18-23 Resource Center 19	Science Interest Center-Levels 13-15-20	Social Studies Center-Levels 24-17-18	Math Center Interest 22-10-21

Brief Explanation of the Applied Skills Division Schedule of the Stanley School and the Maceo School.

The Stanley School will operate specific learning centers at the applied skills division level; so will the Maceo School. Both schools will provide students the opportunity to have a differentiated schedule in that students will move on a fixed schedule from 8 through 12 noon and in the afternoon children should move to interest centers. Teachers will always have the perogative to move different group or levels into the Resource Center. Also children should have the opportunity to remain in a specific center to complete special work when their teacher involved agree that they can do so.

The Stanley School, at the Applied Skills Division, will provide each child the opportunity to work with one single teacher, (specialist) in the Cultural Arts Center. Also, most of the students enrolled in the Stanley School, the Applied Skills Division, will be provided the opportunity to work with all teachers in the different learning centers.

It is suggested that during the first 4 to 6 weeks that children in both schools be assigned to Interest Centers in the afternoon. After the first 6 weeks, children should be able to move to the Interest Centers on their own. After the first 6 weeks they should be capable to work out their own schedule in the afternoon. Of course the four (4) levels that did not have Language Arts in the morning must be scheduled into the LA Center in the afternoon periods. Also the teachers should utilize the afternoon to plan individually with the children and provide them the opportunity to plan their own work, etc. When children are in the learning centers in the afternoon, teachers should emphasize student team learning, student planning and teacher counseling for learning.

8. THE ORGANIZATION OF SPACE

The architectural structure of both schools afford the following for team teaching:

1. Spaces are now afforded group work areas that will realistically accommodate from 1 to 35 children. No More !

2. Movement of youngsters should not be restricted as it will occur with a minimum of confusion, commotion, and conflict.

3. Limited space has been provided for teachers to work, plan, study, and/or hold conferences in small groups.

The Basic Skills Division, which consists of 4 teachers and approximately 100 students, is housed in typical classroom spaces adjacent to the Library or Resource Center at both schools.

The Applied Skills Division, which consists of 4 teachers and approximately 120 students, is housed in 4 typical classroom spaces in the same building of each school.

The Resource Center, equivalent in space to approximately 1 1/2 typical classrooms, is located between the 2 instructional divisions and should prove to be the pivotal point of the program.

The Basic Skills Division is organized for space utilization as indicated in Figure 9* Four "homebases", or learning centers, are provided in each school. * Figure 9 only shows the space plan for the Stanley School.

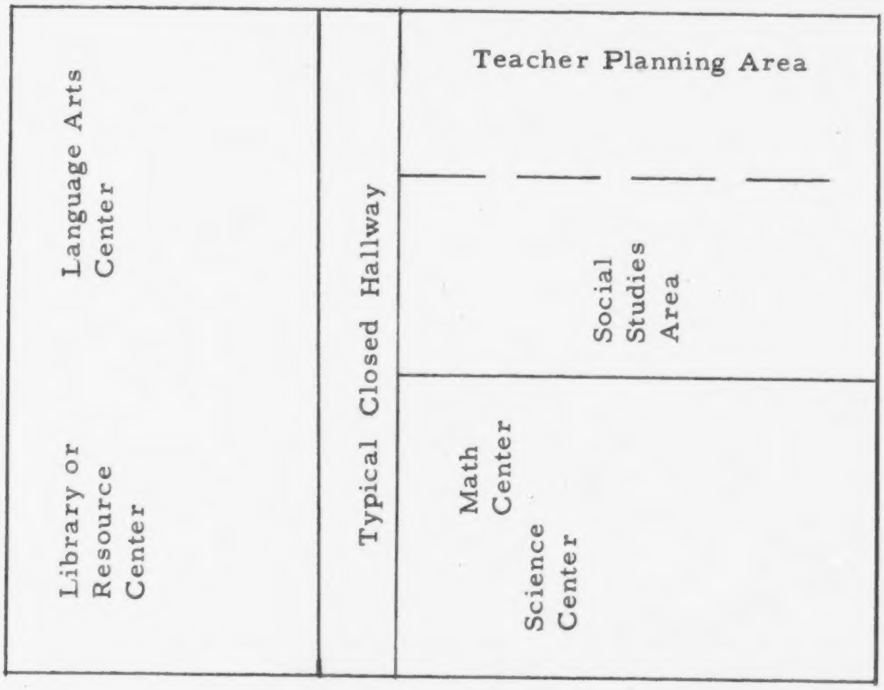
Language Arts Center
Library or Resource Center
Typical Closed Hallway
Teacher Planning Area
Social Studies Area
Math Center
Science Center

Figure 9. Basic Skills Division. Space utilization at the Stanley School of Traditional Classroom Spaces.

The Science Center provides 1 classroom space for science study. Tile flooring permits not only science study but also science material utilization work. The science area should be a high movement area and should improve the participation and/or involvement of students in working with differentiated manipulative materials.

The Applied Skills Division in both schools is organized for space utilization similar to the Basic Division as indicated in Figure 10. Four "homebases" are also provided in the Applied Division.

The Resource Center as shown in Figure 11 should permit an uninterrupted flow of students from the learning centers. The resource center should serve as the main repository for resource materials and student operated media. However, many of the currently needed materials will be decentralized to the

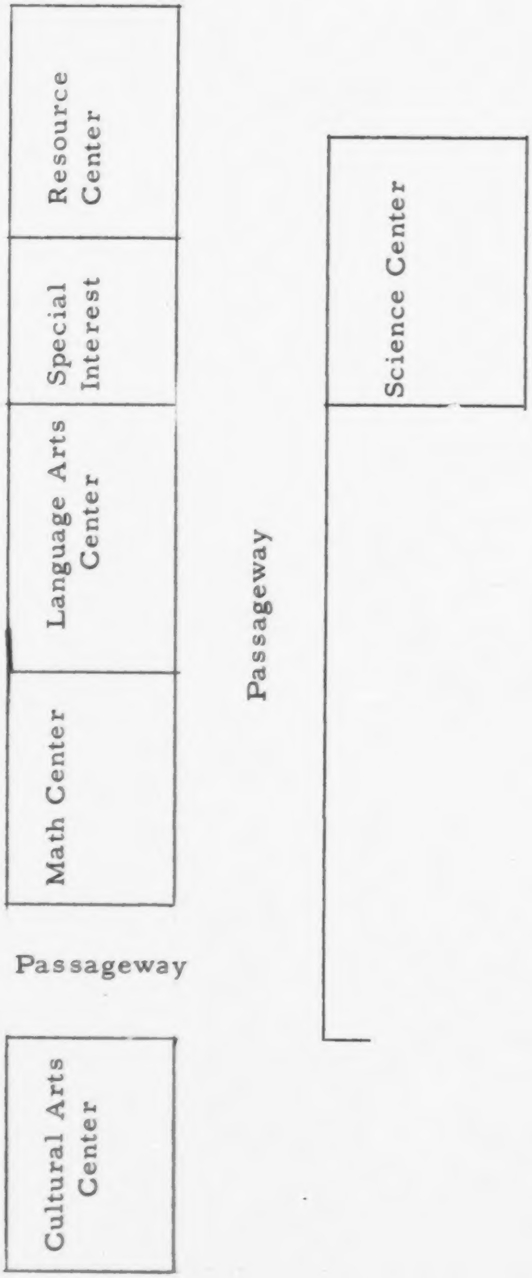
Resource Center
Special Interest
Language Arts Center
Math Center
Passageway
Cultural Arts Center
Passageway
Science Center

Figure 10. Applied Skills Division: Space Utilization
Stanley School

learning centers.

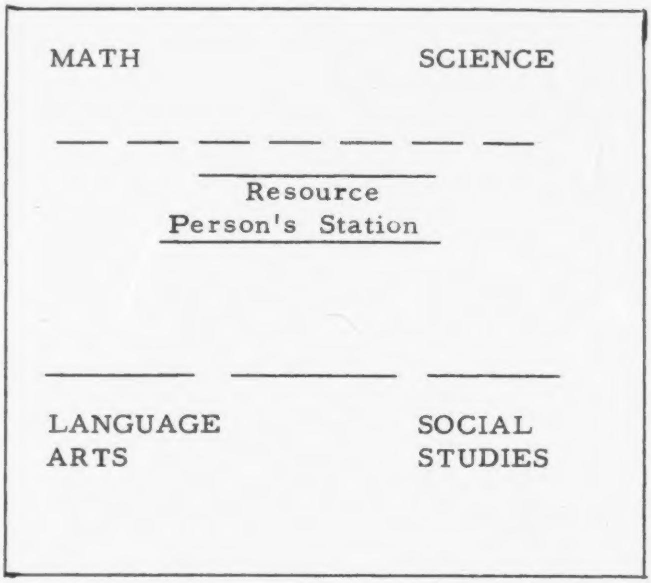

Figure 11. Resource Center. Equivalency of 1 1/2 traditional classroom spaces.

The Resource Center should specify space for Science, Math, Language Arts, and Social Studies materials; as well as an area for the Resource person's station and recreational activity, such as pleasure reading, listening to tapes on music, stories, etc. The Center hopefully will also provide supplementary and enrichment materials to reinforce concepts and skills learned in the instructional program conducted in the learning centers. Thus, the person in charge of the Resource Center must be involved in the team deliberations to gain a "fix" on the learning supportive activities necessary to the "complex" of progress envisioned in the program.

9. MECHANICS OF OPERATION

Many decisions will be required in the daily operation of the instructional program offered. Therefore, the following operational procedures are suggested for both the Stanley and Maceo Schools.

a. Movement of Youngsters. All youngsters will be assigned a homebase teacher. Each student should spend at least one-third of the day with his "homebase" teacher as reflected in the schedules presented in figures 4-7-8 in this document.

b. Homework. Hopefully because of better utilization of the school day and the premise that youngsters will be permitted to learn instead of teachers "having" to lecture all day, homework will be minimized. Moreover, the major reason for any type homework has been traditionally to afford drill and/or practice for the students. Teachers will be expected to introduce concepts and/or skills and permit youngsters to reflect their degree of understanding of these while under the supervision of the teacher. The above hopefully implies that maximum interaction between the teacher and each youngster will be in evidence. Certainly some homework is essential, i.g., reading, research, writing, some drill in arithmetic, projects, etc. Therefore, no homework for the school youngsters should exceed 30 minutes a day. Moreover, only one subjects should be assigned per day to permit more intensive study on the part of the student. Recreational and supplementary reading should be encouraged for all students at all times. Homework is expected to be of sound educational value and not simply busy work. In addition, any homework assigned should be evaluated with the student the following day. This should be done no later than in the afternoon when children are operating in the interest centers.

c. Reporting Practices. Traditional report cards will not reflect the educational concept proposed in both schools. Therefore, a new type of reporting practice must be analyzed and implemented that will coincide with what the teachers feel is important to report regarding the child's progress.

Failures should be non-existent in both schools, because each youngster should proceed at his own rate and level. However, some unsatisfactory progress will be existent in situations where youngsters, for perhaps a complexity of reasons, do not progress at a rate commensurate with their ability.

Supplements to the traditional report card will be utilized this school year. These should reflect the youngster's levels in arithmetic and reading, and the letter grade should reflect progress as compared to local norms in each area.

Parents must be encouraged to have at least teacher-parent conferences during the school year.

d. Small Group Instruction. Only two levels will be scheduled at one time into the L.A. Center. Otherwise teachers will be assigned to 3 groups and they will remain with those groups until the teaching team decides to regroup the children. Students can progress vertically from one group to another with the team leaders, the team members and the principal's approval.

Each level of youngsters should exhibit vertical progress and each teacher is expected to individualize her teaching procedures. Theretofore, the primary reason for moving youngsters from group to group is determined by the variance in achievement of individual children within a team. Therefore, the rate of achievement by each child should determine ultimately the number of students in each group.

Introduction of skills and/or concepts, interaction between student and teacher and opportunities for reinforcing activities are the primary purposes of incorporating the instructions/programs proposed herein. Many follow-up activities must be programmed with the Resource Center person in order to insure a realistic flow of youngsters into the Resource Center.

e. Large Group Instruction . Large groups early in the program should involve no more than 35 or 40 youngsters, dependent upon the activity. As the program develops, teachers will ascertain the types of activities and number of students to be involved in all types of instructions.

f. Student-Teacher Utilization . Teacher trainees or interns will be assigned to a team and have many opportunities to plan, teach and observe. They will be given responsibility for SGI. However, they will also be assigned, as needed, to various levels to work with small groups of youngsters under the leadership of the team leader. Moreover, they will be expected to develop and teach selected units in all areas. Their opinions and suggestions should be encouraged as the team approach is dependent upon the worthwhile contributions of all personnel involved.

g. Development of Units. The unit plan will be utilized in the development of the curriculum. Each team memeber is expected to develop a master unit in her assigned area for all members of the team. These units should be prepared at least 2 weeks in advance and include a comprehensive collection of objectives, activities, teaching aids, and evaluative materials. They should be presented to the team members and prior to the actual presentation to the students each team member should have an opportunity to critically analyze and suggest improvements in the unit.

h. Planning Sessions . Planning time is understandably essential for the educational efficiency expected from this type program. The flexible scheduling of students permits opportunities for unencumbered teacher time during the school day. However, team planning sessions must be held after school hours and should be no longer than 45 minutes. Agendas should be prepared by the team leader and the team coordinator and presented to team members in advance of the planning sessions. Professional interaction of teachers should insure greater accomplishments for learning on the part of children through planning.

10. PROPOSED IMPLEMENTATION PROCEDURES

Present classrooms in both schools will now become designated as learning centers. Thus, learning materials in the various areas will be placed in those areas designated as learning centers. (The above should be completed by August 20th)

The children, grades 2 through 6, will be grouped into 24 groups with groups 1 through 12 assigned to the basic skill unit and groups 13 through 24 assigned to applied skills unit. (The above must be accomplished by August 20th)

Each teacher will function as a member of a team of 4. One teacher will serve as the team leader of their team for a period of 9 weeks. The initial team leaders for each team should be assigned by August 20th and the team coordinator should be designated by August 15th. The team coordinator should be provided the document immediately following the approval of the Superintendent.

A three day in-service program for the teachers should be provided on the following dates; August 20-21-22-24 and teachers should receive a total orientation concerning the program from the Principal and one consultant.

Teachers should be provided a work sheet (enclosed) and the consultant and Principal should work with the teachers to insure that they can implement the proposed program.

STUDENT SCHEDULE WORKSHEET

Time

Learning Centers - Level Assignments

A NEW EDUCATIONAL DELIVERY SYSTEM:

"THE CLOVERPORT PLAN"

PREPARED BY:

THE ESEA, TITLE III PROJECT TO IMPROVE

THE ADMINISTRATION AND MANAGEMENT OF THE CURRICULUM

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INTRODUCTION: BACKGROUND INFORMATION:

In November of 1968, Mr. William L. Bennett contacted the Director of the Title III ESEA Project To Improve The Administration And Management Of The Curriculum, requesting that the aforementioned project enter into a programatic arrangement wherein the Cloverport School District could promote activities to improve the educational program offered to the children enrolled in the Cloverport School District.

After several conferences with the Superintendent and other administrative officials in the Cloverport School District, an agreement was made to pursue a course of program projection that would be based on three basic factors. The factors are as follows:

1. An examination of the existing program offered children in Cloverport.
2. The growth potential (student population wise) of the Cloverport School District.
3. Review of the existing educational programs now available and from this review, propose a new delivery system of educational experiences for the children in the Cloverport School District.

Those concerned with this document should be aware that the Cloverport School District is a small independent school district located in Western Kentucky and that Kentucky as a state is professionally committed to an approach to consolidate or merge small educational units into larger units because the large units can offer children a better or more advantageous education.

PART ONE

Contiguous with the above, those concerned with an educational delivery system have a paramount responsibility to examine the performance of the children presently in attendance. Thus the first part of this report is focused on the existing delivery system offered the children in Cloverport in terms of the following factors.

(1) The academic achievement of the children enrolled and the awards provided children in terms of grades.

(2) Teacher attitudes

(3) Student evaluation of teacher attitudes

(4) Self evaluation of teachers

(5) Student problem areas

(6) An appraisal of the existing organizational structure

Parts 1 through 5 above focused upon the acquisition of data concerning the students and the teachers in the Cloverport System: First, regarding the students, very little objective test data was available in the existing records. Instead of attempting to test all students, it was decided to use data obtainable as a result of participation in the Kentucky State Testing Program in the early spring of 1969. This provided for securing measures of mental ability and academic achievement concerning students in Grades 4, 8, and 11 through the administration of the California Test of Mental Maturity and the California Achievement Test.

The school marks were obtained and were used for comparitive purposes. The Mooney Problem Check List was administered to all students, Grades 7-12, to determine the type and frequency of personal problems identified by them. Second, regarding the teachers, it was decided to emphasize attitudinal measures and three instruments were used. The teachers were administered the Minnesota Teacher Attitude Inventory and a new, unpublished inventory entitled "How I See Myself as a Teacher", authored by Dr. Jim Peyton and Dr. Joe Gormley. A parallel inventory of the latter instrument was completed by the teachers' students and provided an insight to teacher attitudes as viewed by their students. This companion inventory is entitled "How I See My Teacher" and is also an unpublished inventory by the same authors. The unpublished inventories have yet to be normed but still presented some interesting and pertinent information. The above instruments are included in the Appendix. The results of the above were delivered in person to school administrators officials personally. This was done because of the sensitive area dealt with and because of the small number of teachers involved.

The children's achievement level is about the same as the childrens' level enrolled in Kentucky Schools in general as measured by the California Achievement Tests. The test results are included in the Appendix.

An examination of the above data by the consultants indicates that the Cloverport Administrative Officials should: (1) initiate an intensive examination of the grading practices pursued by the instructional staff, (2) initiate steps to develop new educational programs for low ability students, (3) promote a staff development program which would include sensitivity training and "T" group activity, and (4) appoint a part-time person to work with program development with initial focus on Item Number 3 above.

II. THE GROWTH POTENTIAL (STUDENT WISE) OF THE CLOVERPORT SCHOOL DISTRICT

The Project Director of the Title III ESEA Project secured the services of Dr. Charles A. Glatt from Ohio State University to survey the growth potential of a corridor of Hancock and Breckinridge Counties. Dr. Glatt was secured because the Director of the KASA Project wanted to know if a school district could, with some accuracy, predict the growth pattern of a student population. Dr. Glatt's report is enclosed below.

Hancock and Breckinridge County, Kentucky, are located immediately south of the Ohio River between Louisville and Owensboro. The two counties historically have been characterized by relatively stable, rural and small town populations, by small farms, local businesses, and by conservative fiscal policies.

Three public school districts are located in the two counties: (1) the Hancock County School District; (2) the Breckinridge County School District, and (3) the Cloverport Independent School District in the Northwestern corner of Breckinridge County. School enrollments have maintained a relatively even growth rate throughout the two counties for many years.

Projected Population. According to the latest estimates released by the United States Bureau of the Census, Breckinridge County's population is approximately 14,600, and Hancock County's population is approximately 5,900. These counties represent an area in Kentucky that has experienced very little population change for many years. (See Table I)

TABLE I. Population changes in Breckinridge and Hancock Counties, Kentucky. 1950 to 1968

County	Years		
	1950	1960	1968
Hancock	6,009	5,330	5,900
Breckinridge	15,528	14,734	14,600

Source: United States Census Reports

Because of industrial development that is currently underway in Hancock County, the population of both counties are expected to increase rapidly during the coming few years. The extent of that increase is examined below.

Industrial Development. Although industrial growth is not new to certain areas of Kentucky, especially along the Ohio River, Breckinridge and Hancock Counties have not shared greatly in the economic growth that ordinarily accompanies industrialization. Table II indicates employment patterns in the two counties as of June, 1968.

The occupational picture in the region is changing rapidly. Industrial activity in Hancock County is showing a steady increase and manufacturing concerns employ over 650 workers currently. Primary metals, printing, stone and clay, and silicones are the leading products with about 625 workers engaged in these activities.

TABLE II NUMBER OF WORKERS COVERED BY KENTUCKY UNEMPLOYMENT INSURANCE LAW CLASSIFIED BY INDUSTRY AND COUNTY, JUNE 1968

Industry	Number of Workers Covered	
	Hancock County	Breckinridge County
All industries	1248	877
Mining and Quarrying	--	36
Contract Construction	340	83
Manufacturing	809	337
Transportation, Commercial and Utilities	--	22
Wholesale and Retail Trade	55	305
Finance, Insurance and Real Estate	--	29
Services	--	58

Source: Kentucky Department of Economic Security, Research and Statistics Unit, Monthly Report for June, 1968.

According to information made available by the personnel managers of the large industrial complexes that are being developed in Hancock County, population growth patterns in the region will change abruptly in the very near future. Manpower projections for the five companies are presented in Table III.

TABLE III. PROJECTED MANPOWER NEEDS OF FIVE CORPORATIONS IN HANCOCK COUNTY, KENTUCKY

Company	Manpower needs as projected by personnel managers	
	1970	1975
Wescor	125	185
Western Kraft Corporation	120	120
National Southwire Aluminum	800	800
Southwire Rod and Cable Mill	250	250
Harvey Aluminum Co.	550	550
Totals	1845	1905

Source of data: Letters from Personnel Managers of the Corporation.

Only the 1970 projection is assumed to be accurate in Table III because of unforeseen additional expansion. As of January 30, 1969, National Southwire Aluminum Company and the Southwire Rod and Cable Mill had 700 construction workers on site. The number of non-permanent workers will increase to approximately 2000-2500 during the construction season. These workers will have little effect on school enrollments due to the temporary nature of their jobs. The personnel manager of the Southwire companies made no projections of permanent labor needs beyond 1970. In Table III the figure for that base year (1970) was simply carried over to 1975. Similarly, the Harvey Aluminum Company's projected manpower needs and those for the Western Kraft Corporation were given only for 1970 by the personnel managers. Wescor's projections for two base years (1970 and 1975) were made by company officials.

Implications of Industrial Growth For Population Changes. Throughout the United States the ratio of employed labor force personnel to total population is approximately 1 : 3.70. Workers who will staff the five large plants in Hancock County are assumed in this report to have families who will move into the area over the next few years with most of them coming during the next one or two years. If the same approximate ratio of labor force to total population characterizes the newcomers, these data imply that approximately 6800 persons will be added to the area population shortly.

Incoming industrial workers will necessitate expansions of other aspects of the regional labor force; i.e., service workers, sales and clerical people. Again, throughout the country the ratio of industrial personnel (managerial, clerical, and skilled laborers) to necessary adjunct labor personnel is approximately 1: .85. This ratio implies that the 1845 industrial workers may be supplemented by an additional 1570 service personnel. Many of these, however, may be wives of men who will be working in the plants and people who already live in the region. Experiences that the writer of this report has had with other "boom" communities suggest that approximately one-third of the service worker force may be expected to be newcomers -- or about 500 to 525 new families. When the ratio of workers to total population is applied (1 : 3.70), the projected supplementary or service population is roughly 1900. These projections total 8700 for the total increase in population that can reasonably be expected in the region.

In communities that have already experienced industrial growth and development, a readily available supply of workers can be found. Persons with needed skills and abilities are drawn to areas that offer higher wages, better job opportunities, and new experiences. Unless development is occurring in a large community inhabited by many persons, such a labor pool is not generally available. The Hancock-Breckinridge area fits this latter description.

Very few unskilled personnel will be needed by the industrial expansion currently developing in the area. Although some job opportunities may exist in the five large plants, for the most part, workers who already have skills will be drawn to the area. The available labor supply presently residing in the two county area may find better job opportunities in the adjunct or service areas than in the plants.

Numerous documents that depict labor supply in western Kentucky tend to indicate that for the type of industry being developed in Hancock County, the region cannot supply a very large portion of needed workers. Historically, young people have migrated from the area upon completion of secondary schooling to areas of better job opportunities. From the writer's experience of living and studying populations in the cities of the North and the Midwest, he has found that the young people who move into those cities from Kentucky, West Virginia, Tennessee and other states are not prepared for the kinds of jobs that the cities have to offer. Neither are they prepared for the jobs that will be available in Hancock County in the future.

The key to population projections within the region is availability of housing. Currently few residential units are available either for sale or for rent in the two counties. Rental property is especially scarce throughout Hancock County. Several residential areas are under development in which a few building lots and/or houses are available. As of October, 1968, only about twenty new houses were for sale in the Hawesville-Lewisport area and few were under construction. The two largest subdivisions in the County, Hancock Park and Lincoln Country Estates, have a combined total of 290 lots available for housing.

A large apartment complex is currently being built in Cloverport with capacity for 48 families. According to the builder, this structure is one of three that have been planned. Because of the scarcity of existent housing, the relatively short distances involved, and the availability of all year, hard surfaced roads, one can safely predict that the in-migrants will settle in those communities that offer the best supply of housing, trade and commercial facilities, and educational opportunities. Religious, recreational, and social organizations are generally assumed to be of lesser importance in attracting people to a town where options exist.

Several factors will influence development of residential housing in this area. Included among these are: (1) availability of land; (2) terrain; (3) availability of public utilities; (4) tax structures; and (5) financial backing. The writer's observations and investigations of the two county area suggest no great differences from county to county in items 3 and 4 above. Cloverport seems to offer more land for building purposes because of terrain, than the other nearby towns offer. The land is generally quite hilly along the Ohio River in both counties, which would tend to place a premium on the small amount of level land that does exist. Inquiries made to the large industrial organizations that are developing in the area revealed no intent on the part of those organizations to construct "company" housing for their workers.

School enrollment projections. As indicated above, certain geographical factors suggest that much of the population increase occasioned by industrial development in Hancock County might occur within that area currently served by the Cloverport Independent School District. School enrollment projections again can be based on national norms with some measure of validity. Throughout the nation, 18.51 per cent of the total population are of elementary school age and 7.48 per cent of the total are of high school age. However, migratory patterns suggest that older persons likely will not be involved in the movement to the Hancock-Breckinridge area. In the national population under 65 years of age, 20.46% are of elementary school age and 8.27% are of high school age. When these figures are applied to the data presented above for in-migrants to the region, the projected influx of students into schools in Hancock and Breckinridge Counties is

Elementary	1780
Secondary	720

The related data, opinions, and trends examined prior to preparation of this report have led the writer to project that between one-third and two-thirds of the anticipated population increase occasioned by industrial development might or could occur in the geographical area served by the Cloverport Independent School District. If this does occur, the District needs to anticipate dramatic increases in its school enrollments. These increases are projected in Table IV.

TABLE IV. Projected Student Increases in the Cloverport Independent School District for the 1970-1975 Time Period (Based on Different Percentages of the Total Anticipated Population Increase for the two-county Area).

The total population increase projected for the area is 8700 persons.

Per Cent of Total	Base Increase for Cloverport	Elementary Increase	Secondary Increase
15	1,305	267	108
30	2,610	534	216
35	3,045	623	252
40	3,480	712	288
45	3,915	801	342
50	4,350	890	380
55	4,785	979	418
60	5,220	1,068	456
65	5,655	1,157	494
70	6,090	1,246	532
75	6,525	1,335	570

Recommendations. Certain of the statements that appear in this report are based on factual data; for example, the numbers of persons who will be employed in the five large industrial complexes. Other statements have been extrapolated from trends, ratios, proportions, and national norms. Projecting population data is at best a hazardous undertaking.

The projection made in this part of the report may be entirely misleading because no one can predict accurately just what the population picture in the area under review, will actually be in the future. That a large number of people will be coming into the area seems to be beyond serious doubt. Regardless of the magnitude of the in-migration, the schools will be affected.

The consultant completing this section makes the following recommendations as part of this document: The Cloverport Independent School District should consider retaining its secondary school at least until the envisioned portion of newcomers to the area have settled in the housing that must become available. If the projections made here prove to be erroneous, the children of Cloverport may receive better quality in their education through merger with the Breckinridge County System. On the other hand, if a large portion of the migrants settle in and around Cloverport, the children may gain educational advantage through the present district's structure. Regardless of what the future holds, the key factor in planning educational developments ought to be concern for the children to be served.

Contiguous with the above, it should prove worthwhile for the officials of the Cloverport School District to complete an annual survey regarding the growth potential reviewed in this document.

PART THREE: PROPOSED EDUCATIONAL DELIVERY SYSTEM FOR CLOVERPORT

The consultants involved in this Project have had a number of program development experiences - non-graded, team teaching, individualized instruction, module scheduling, etc. The recommendations herein are proposed and projected from the consultants expertise concerning the above and from the data presented in Parts one and two of this document. The author, before proposing a new plan, reviewed three basic delivery systems: one in the Cyprus Fairbanks School District in Texas (The Matzke Elementary School) the McNeill School in Bowing Green, Kentucky and the Sebastian Roy School in St. Bernard Parish, Louisiana. The plan presented herein for the elementary school is a combination of the three with a greater linkage into the Matzke Plan.

Those reviewing this document should observe that the consultants are proposing a "total non-graded" program - grades one through twelve for the Cloverport School District.

PROPOSED PROGRAM FOR THE CLOVERPORT ELEMENTARY SCHOOL - GRADES TWO THROUGH SIX

Individualized instruction has been receiving recognitition for years. Many educators have attempted to reach solutions by proposing new organizations and instructional schemes ranging from continuous progress programs to departmentalization to team teaching, or combinations thereof. Many of these efforts have stopped after the implementation of the new organization.

The proposed Elementary School Program offered herein provides an individualized approach to learning. To accomplish this objective, students hopefully will receive instruction more nearly on their level of ability and achievement. Also, teachers are provided a team teaching organization that facilitates the above.

80

Proposed Objectives of the Cloverport Elementary School

The objectives of the organizational and instructional concepts of the Cloverport Elementary School are as follows:

1. Provide each student the opportunity of progressing at his own rate;
2. Afford each student more alternatives and the opportunity of not only working on his own level, but approaching his learning from a view dictated by his unique interests, abilities, and cognitive style;
3. Insure better utilization of teacher expertise;
4. Develop curriculum materials applicable to an individualized instructional program;
5. Utilize and evaluate various types of media, both printed material and hardware, for students and teachers;
6. Afford in-service training opportunities for teacher-trainees, teachers, administrators, and other related personnel.

ORGANIZATIONAL CONCEPT

Individualized learning will be facilitated by team teaching and a continuous progress program, both of which are not new. Nowever, since there exists quite a diversity of concepts on team teaching and continuous progress programs, the concepts proposed in this document are reflected herein.

Team Teaching. There are several definitions and types of team teaching. However, the Cloverport School District chooses to adhere to the philosophy of team teaching that represents an instructional organization which allows teachers to plan, teach, and evaluate the instruction of the same group of students. Moreover, it is proposed that the Cloverport Elementary School be organized as depicted in Figure 1. A description of each of the roles illustrated in Figure 1 is also provided.

Figure 1 - Basic Organization Design:

PRINCIPAL

Basic Skills Division (1, 2, 3 grade level children)

Applied Skills Division (4, 5, 6 grade level children)

Team Leader

Teachers

Interns Student Teachers

Teachers

Intern Student Teacher

Teacher Aid

Clerical Aid

The Team Leader

1. ability to initiate structure in a situation;
2. quality of being considerate of others;
3. exceptional knowledge of the learning process and education objectives;
4. talent in applying these skills and quality and in selecting appropriate leadership direction in specific situations.

Teacher (T)

This category includes both experienced teachers with broad general training and teachers of relatively little experience. This does not represent a terminal role as each staff member is expected to increase his professional competencies in specialized areas.

Intern Student Teacher (I)

A trainee in a program of teacher education doing full-time supervised teaching. The work of the interns will be supervised by a experienced teacher or the team leader. Interns are expected to assume the role of a beginning teacher, with opportunities to observe and work with several experienced teachers.

Teacher Aid (TA)

A mature person who enjoys working with children. She does not qualify as a teacher but works with children in non-instructional situations: e.g. supervises recess, lunch periods, bus loading and unloading; operates mechanical teaching aids; assists in supervision in the Resource Center; and corrects objective tests. Other tasks will be defined by the demands of each team and approved by the Principal.

Teacher Aid (CA)

This person assists with routine clerical tasks such as typing, duplication, filing, and recording attendance.

The Principal and Teachers will constitute an Instructional Committee for the constant evaluation of the total program.

Each teacher of the Cloverport Staff will be assigned an area or areas of specialization based upon his or her interests and proficiency. This does not advocate total departmentalization since all teachers are expected to teach language arts, arithmetic, social studies, and science. Semi-departmentalization should exist in music, art, physical education, antropology, economics, and sociology. It does imply that each member of a team assumes a greater responsibility for that area of the curriculum assigned, and she is expected to take the initiative in the preparation and planning of new units and, on occasions, provide in-service training for team members.

INSTRUCTIONAL CONCEPTS

The basic instructional concept proposed does not require additional personnel, although it is felt that additional professionals and nonprofessionals personnel are advantageous. However, the basic reason for employing team teaching is an effort to reduce duplication of teacher efforts by "redeploying" youngsters through a more refined grouping procedure and permitting vertical movement of youngsters without regard to traditional grade level barriers. Figure 2 depicts a traditional grouping procedure. Although figures 2 and 3 reflect only one grade level, the case of "crossing grade lines" through such a procedure is quite apparent.

TRADITIONAL GROUPING

Teachers	A	B	C	D
Groups	1	1	1	1
	2	2	2	2
	3	3	3	3

Figure 2 -- This type grouping indicates four teachers teaching the same grade level with three groups in each room. In such a situation, students are usually grouped into a high, average, and slow group.

TEAM TEACHING GROUPING

Teachers ________	Team of A, B, C. D
	12
	11
	10
	9
	8
	7
	6
	5
	4
	3
	2
	1

Figure 3 -- With the above, teachers working cooperatively twelve "levels" or groups are formed instead of three - thus, a narrower range of achievement within each group is apparent compared to the typical self-contained classroom.

Grouping Procedures

Youngsters will be grouped homogeneously in reading and placed in levels commensurate with their achievement. Although youngsters will be grouped primarily according to achievement, each teacher is expected to be cognizant of the ability of each student, and if achievement and ability are significantly different, reasons for this span must be analyzed and youngsters guided to achieve more closely to their ability level.

The following criteria will be utilized in homogeneously grouping youngsters:

1. Mental Age (Chronological age X Intelligent Quotient)
2. Cumulative Records - past "grades" tests results, etc.
3. Achievement and Aptitude Test Scores
4. Teacher Opinions
5. Diagnostic Tests

Thus, utilizing the above data, a more refined grouping procedure is assured.

Students will be hetrogerously grouped at different times in other subjects to permit more student interaction. However, to insure a high degree of non-gradedness in these subjects, part of the instructional time will be spent with groups determined by students' interest, special knowledge, and proficiency.

Moreover, the multigrading of reading will be transcended to the extent that youngsters do not have to progress through each level in sequence. He should be able, through diagnostic testing, to progress more than one vertical level without progressing through each successive level.

It should be apparent from the proposed grouping procedures that a true continuous progress or nongraded program requires a sequential, spiral curriculum. It is envisioned that the staff will eventually develop a curriculum which introduces the same concepts and/or skills at all levels with the degree of difficulty being determined by the maturation stage of each student's development.

Scheduling

The Cloverport School will utilize a form of block time differentiated - teacher made schedule for the elementary school children enrolled in grades 1-6. The children should be initially grouped according to their measured reading ability and the children normally functioning in grades 2 through 6 should be placed in 19 levels or groups commensurate with their reading ability. Children in grades 2 through 3 will probably be placed in levels 1 through 10 and children in grades 4 through 6 in levels 10 through 19. First year children children will not be grouped with other children or until appropriate measures have been applied and they can be placed in desired work groups.

Children enrolled in grades 2 through 6 will be divided into two divisions; the Basic Skills Division and the Applied Skills Division. The Basic Skills Division will include the children assigned to groups or levels of 1 through 10 and the children assigned groups 11 through 19 will be assigned into the Applied Skills Division. Each Division will operate from learning centers with the teachers moving with the child and the teacher also teaching in his or her strength areas for a part of the day. Tentative schedules for the Basic and Applied Skills Divisions are presented in the Appendix.

Curriculum Development

Team teaching as proposed in the School in Cloverport hopefully stresses efficiency. However, due to the complexity of decisions confronting teachers, the development of a curriculum that will exhibit the kinds of learning desirable in both large - and small - group activity. The guidelines below identify the various content areas of the curriculum.

Reading. Basal series will be followed. However, words and color, initial teaching alphabet, linguistics, and the sight method should be made available for implementation in the event evaluation of individual situations indicate little or slow achievement in the Basal Series.

Arithmetic. Locally adopted textbook series will be utilized to insure a thread of continuity. However, programmed materials and materials from outstanding curriculum projects, such as the Madison Project, Minnemast, S.M. S.G., etc, should be secured and utilized to individualize instruction.

Science. Basal Series will be utilized as guides. However, A.A.A.S., E.S.I., and other innovative science materials hopefully will be utilized in the sequential development of science curriculum.

Social Studies. Spiral units are envisioned as being developed from locally adopted textbook series and other available materials. Sequential themes or concepts should be developed on a continuous basis.

Language Arts. Basal Series insure limited continuity. However, development of units of study will be developed to insure more individualization of instruction.

Spelling. Basal spelling lists should be utilized as a minimum spelling program. Articulation with other subjects is essential to insure individualization. Moreover, each student should compile a spelling notebook from all subjects.

Music, Physical Education and Art. Study guides in each area will be developed to insure sequential vocal music development and appreciation of various kinds of music, physical fitness development and a structured health program, and an appreciation of and instruction in art.

Economics, Anthropology and Sociology. Units should be developed for implementation into the social studies curriculum. Units will be spiral type to facilitate implementation at all levels.

The development of curriculum materials, as outlined above, recognizably limits the alternatives for each subject area. These limitations are made purposeful to insure a base upon which to develop curriculum materials. Each team is expected to contribute to the continual development of a structured curriculum which will afford youngsters several alternatives. Moreover, each staff member will be expected to continue their professional training with specific emphasis on selected areas of the curriculum; e.g., reading, arithmetic, research methods, evaluation instruments, etc. The teachers should be involved in staff development activities supported by the ESEA Title III Region II Project.

THE ORGANIZATION OF SPACE

The architectural structure of the Cloverport Elementary School affords the following requirements necessary for team teaching:

1. Spaces are afforded for children to work in groups of from 1 to 40.

2. Movement of youngsters is not restricted as it should occur with a minimum of confusion, commotion, and conflict.

3. Space will be provided for teachers to relax, work, plan, study, and/or hold conferences in small groups, large groups, and/or in private.

The Basic Skills Division, Grade 1 through 3, which consists of three teachers and approximately 95 students, will be housed in three typical classroom spaces in the school.

The Applied Skills Division, which consists of three teachers and approximately 100 students, will be housed in three typical classroom spaces in the opposite side of the building.

The Resource Center, equivalent in space to approximately one and one-half typical classrooms, is located between the two instructional divisions and is the pivotal point of the instructional program.

The Basic Skills Division is organized for space utilization as indicated in Figure 4. Three "homebases", letters A-2, 3, 4, are provided. Area B is a resource area and should be a center to supplement work initiated in the three learning groups.

Resource Center (1) B	Math-Science (2) A
Language Center (3) A	Social Studies - Cultural Arts (4) A

Figure 4 -- Basic Skills Division Space Utilization, Equivalency of 3 Traditional Classroom Spaces.

The Science-Math area should provide the needed space for science study and tile flooring will permit realistic science activity as far as spillage is concerned. The Social Studies area will also be used as the primary art area. These areas were selected specifically for activities which encourage "noisy" participation and/or involvement of students in working with different materials which might be harmful to carpeted areas.

The Applied Skills Division, the fourth, fifth, and sixth, is organized for space utilization similar to the Basic Division and as indicated in Figure 5. Three homebases are provided in Areas B1, B2, and B4.

Language Arts - Math - Science

B (1) Language Center	B (2) Math-Science Center
B (3) Materials-Resource Center	B (4) Social Studies - Cultural Arts Center

Figure 5 -- Applied Skills Division Space Utilization. Equivalency of 4 Traditional Classroom Spaces.

The Resource Center, as shown in Figure 6, permits an uninterrupted flow of students from the learning centers. The resource centers should serve as the main repository for resource materials and student operated media.

Also, many of the materials presently found in the traditional library should be decentralized and placed in the learning centers.

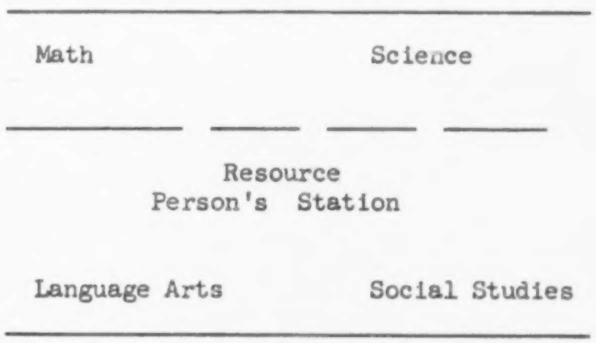

Figure 6. Resource Center. Equivalency of 1 traditional classroom space.

The Resource Center should contain space for Science, Math, Language Arts, and Social Studies materials; as well as an area for the Resource person's station and recreational activities, such as pleasure reading, listening to tapes on music, stories, etc. The Center hopefully will provide supplementary and enrichment materials to reinforce concepts and skills acquired in the instructional program at the individual learning centers.

MECHANICS OF OPERATION

Many decisions are required in the daily operation of an individualized instructional program. Therefore, the following operational procedures are proposed for the Cloverport Elementary School.

Movement Of Youngsters. All youngsters will be assigned a homebase teacher.

Homework. Because of an envisioned better utilization of the school day and the premise that youngsters are permitted to learn instead of teachers lecturing all day, homework will be miminized. Moreover, the major reason for any type homework has usually been to afford drill and/or practic for the students. Teachers are expected to introduce concepts and/or skills and permit youngsters to reflect their degree of understanding of these while under the supervision of the teacher. This of course, means more interaction between the teacher and each youngster. Certainly some homework is essential l.g., reading, research, writing, some drill in arithmetic, projects, etc. Therefore, no homework for the Cloverport Elementary School youngsters should exceed 30 minutes a day. Recreational and supplementary reading is encouraged for all students at all times. Homework is expected to be of sound educational value and not simply busy work. In addition, any homework assigned will be evaluated with the student the following day.

Reporting Practices. Traditional report cards do not reflect the educational concept proposed herein for the Cloverport Elementary School. Therefore, a new type report practice should be developed and implemented after careful analysis of this document and the learning program itself has been implemented.

Failures should be non-existent because each youngster hopefully will proceed at his own rate and level. However, unsatisfactory progress is existent in situations where youngsters, for perhaps a complexity of reasons, do not progress at a rate commensurate with their ability.

Initially, supplements to the traditional report card will be utilized. The above should reflect the youngster's levels in arithmetic and reading, and the letter grade reflected in all subjects indicate student progress as compared to local norms in each area.

Parents will be encouraged to have frequent teacher-parent conferences.

Small Group Instruction. Small groups will initially be assigned for reading only. Teachers will initially be assigned to various groups and remain with the group for a period of 9 weeks. Students may progress vertically from one group to another only with the team teachers and principal's approval. Each group of youngsters should exhibit vertical progress and each teacher is expected to individualize her teaching procedures. The primary reason for moving youngsters from group to group should be determined by the variance in achievement of all the groups within a team. Therefore, the span of achievement levels determines the number of students in each group.

Introduction of skills and/or concepts, interaction between student and teacher and opportunities for reinforced activities are the primary purposes of Small Group Instruction. Many follow-up activities will be programmed with the Resource Center person in order to insure the flow of youngsters into the Resource Center.

Large Group Activity. Large groups early in the program should involve 35 to 50 youngsters, dependent upon the activity. Envisionally as the program develops, teachers will ascertain the types of activities and number of students to be involved in LGI.

Student Teacher (Intern) Utilization. Teacher traineeds will be assigned to a cooperating teacher and should have prime opportunities to teach. Since they will be considered teaching personnel, they will be given responsibility for teaching all subjects. They will be assigned to various levels and will work under the direct leadership of the cooperating teacher. They will also be expected to develop and teach selected units in all subject areas. They will be expected to work as an active member of a team.

Development of Units. The unit approach will be utilized in the development of the curriculum. Each team member is expected to develop a master unit in her assigned area for all members of the team. These units should be prepared at least 2 weeks in advance and should include a comprehensive review of objectives, activities, teaching aids, and evaluation materials. They will be presented to team members and prior to the actual presentation to the students, each team member will have had the opportunity to critically analyze and suggest improvements in the unit.

The development of a spiral curriculum in sequential form is insured by the articulation of unit planning between all staff members in their respective assigned areas.

Planning Sessions. Planning time is understandably essential for the educational efficiency expected from the type program. A flexible block schedule will be developed that permits opportunities for unencumbered teacher time during the school day. However, team planning sessions must be held after school hours and are proposed to last no longer than one hour. Agendas will be prepared by the team leader and presented to team members in advance of the planning session. Professional interaction of teachers insures more accomplishments in the planning sessions.*

THE MIDDLE SCHOOL - 7-8 GRADES CLOVERPORT PROJECTED PLAN

The Cloverport School District has operated for years and still does on an 8-4 plan. The envisioned and proposed plan injects a "Middle School". The terms is not a familar one the the layman. To him, it might imply another form of Junior High School, but it is not. Both intermediate schools or schools between the primary and secondary units; there the comparison stops. The middle school as proposed is hopefully a continuation of the elementary school concept and, in addition, forms a bridge between the two levels of instruction at the elementary and high school level. It is not a miniature high school. The middle school as proposed will group children according to interest levels rather than ability as characterized in the Elementary Cloverport School.

The middle school is envisioned as a school to provide continuous learning experiences for pre-adolescent and early adolescent students. In Cloverport it is designed to functon as a two year program organized around three major learning centers: language arts, social studies, and mathematics-science combined. Some electives will be provided, and those students enrolled in the middle school who show a high level of interest and ability in a specific area such as science, math, social studies, and language arts will be programmed into the high school curriculum. By the same token, those children showing a low ability in language arts will be programmed into a

* The plan presented for the elementary school has been adapted from the Matzke Elementary School, Cyprus Fairbanks Texas School District. (Permission was granted for the above by Mrs. Kay Killough, Principal of the Matzke School)

special language arts curriculum. The proposed structure removes the conventional gradedness of the traditional Cloverport School and hopefully will fully utilize the new technology of team teaching, individual instruction, programmed learning, and educational media. The proposed organization is designed to provide the best possible instruction for the acquisition of fundamental skills on the part of each child and in addition encourage creativity on the part of students, teachers, supervisors, and administrators. To a very large extent, each student should develop his or her own program of studies to provide continuous learning or instruction without gaps or interruptions.

Basically, middle school experiences will focus on the individual, his achievements, interests, problems, and needs through a flexible design. If he has acquired a skill or gained desired information in specific areas, he should be allowed to move up and work on the high school level. On the other hand, if he is having difficulty, he should be provided the necessary time to master his own problems and if necessary, work out of the Applied Skills Division in the elementary school.

The middle school concept has grown out of some basic changes in the growth and development of young people. They are maturing more rapidly. They are exposed to varied and intense experiences. They learn from influences outside of school at a faster rate than in the past. The knowledge explosion is transmitted by magazine, radio, newspaper, television, and in everyday conversation. Today it is difficulty for any one teacher to manage instruction in all courses of the school program efficiently. Teams of teachers are able to respond to today's student more adequately.

By adapting the learning center concept utilized at the elementary level utilizing teachers differently, it is planned that students will assume more responsibility and become more self-directed. They should be expected to develop more responsive attitudes toward establishing both immediate and long-range goals. The school program hopefully will be more directly related to real life situations. The latter should assist students to develop more positive and more adequate self concepts. The program hopefully will produce more realistic academic achievement records, an accompanying reduction in drop-outs, and a more positive attitude toward learning.

In essence the proposed middle school program for the Cloverport School District will continue the learning pattern established in the elementary school and should promote a greater quantity and better quality of teaching-learning for pre-adolescents and early adolescents than before. In addition the behavioral patterns will be more positive as a result of the activities being more relevant to life and its problems.

Each student enrolled in the Cloverport Middle School should be afforded the opportunity to spend 2 1/2 hours per day in one of the 3 interest centers proposed. Also, each student should be provided the opportunity to move up into the high school program if their rate of growth, both academically and maturation wise, warrants same. Those observing the program after one year in operation should find students moving on an "open-flex" schedule between interest centers and also see middle year students operating in the Applied Skills Division as well as in the high school. A model schedule for the middle school student is presented in the Appendix.

THE CLOVERPORT HIGH SCHOOL PLAN

Those reviewing or examining this document will recall that earlier the consultants indicated that they would propose a total "non-graded" program for the Cloverport School System. Thus, the plan projected herein, hopefully completes the total non-graded system that is envisioned to provide the opportunity for a child enrolled in Cloverport to complete his or her education in less than 12 years. Contiguously, the proposed plan for the "4 year" learning center at the high school level introduces a "new system" wherein both teachers and content hopefully will more effectively accomodate the learner. Also, the proposed plan should provide the opportunity for the school to increase its course content offering without an increase of staff or facilities. The high school program included proposes a 9 week modular schedule featuring individualized learning for students. Characteristics of the plan are as follows:

(1) In the four basic subject matter areas, each area will be offered on a 9 week block module with the student participating in the module three and one-half hours per day for a 9 week period.

(2) The expected electives are also provided the learner.

(3) The 9 week module schedule provides a teacher-student load of no more than thirty-five and as few as five. Thus the program provides an opportunity for the teachers to individualized instruction.

(4) The 9 week module schedule hopefully will provide the opportunity for a student to continue work in a specific area in which he may be experiencing difficulty.

(5) For the student who seeks greater horizons in specific areas and sees no in-depth study in that area, the 9 week schedule hopefully will provide a heretofore unavailable opportunity.

(6) Staff utilization wise, it is envisioned that the non-graded module scheduling will provide more released time for intergal teacher planning.

(7) It is envisioned through this project that the teacher will provide learning experiences for students that will characterize and following: (1) independent study, (2) peer team learning, and (3) community resource inquiry.

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(8) A trial schedule for the 9 week module program is provided in the Appendix.

To implement the aforementioned program, the consultants recommend that the administrators of the Cloverport School District pursue a program that will include the following action strategies.

PROPOSED ACTION STRATEGIES TO IMPLEMENT THE ELEMENTARY PROGRAM - GRADES 1-6

(1) The Superintendent, Principal and one board member should visit the four (4) schools listed below.

Bardstown Elementary School
Bardstown, Kentucky
Dr. Garth Petrie, Principal

G. C. Burkhead Elementary School
Elizabethtown, Kentucky
Hardin County School District
Miss Pearl Miller, Principal

Charles Clark Elementary School
Floyd County School District
Prestonsburg, Kentucky
Mr. John K. Pitts, Principal

The Sebastian Roy Elementary School
St. Bernard Louisiana Parish School District
Reggio, Louisiana
Dr. Martin Power, Principal

The aforementioned 4 schools should be visited before December 1, 1969.

(2) It is suggested that the 2 days in-service training program for the staff of the elementary school - grades 1 through 6, use one at home in discussing exploratory programs and examining the proposed program in this document. The second day should be spent visiting either the Bardstown Elementary School or the G. C. Burkhead School, listed above. This should be done before February 15, 1970.

(3) Between March 1 of 1970 and July 1, 1970, the staff of grades 1 through 6 should spend 3 days re-examining the program proposed in this document and be sensitized to the "action posture" so that they will be receptive and willing to attempt to implement the program proposed. If money is needed for the above, the Title III ESEA Project from Region II should provide a stipend of $15.00 per day per teacher and pay for the consultants selected by the administrative personnel to work with the teachers. The latter approach insures a procedure controlled by the local school district.

(4) In early August, the instructional staff and the administrative staff should be provided the opportunity to participate in a "Sensitivity Training Laboratory' program for a five day period. The above might be paid for by the Region II ESEA Title III Project.

(5) In August of 1970, the Principal of the Cloverport Elementary School should group the elementary children in 24 levels according to their measured reading ability and assign the teacher to those levels the principal feels they should initially work with.

(6) In August of 1970, the Principal should, with the help of maintenance personnel, move all subject matter material into the rooms designated as area learning centers.

(7) In August of 1970, the Principal should conduct a 2 day in-service program for the elementary staff and review the total learning program envisioned in this document.

(8) In September of 1970, the aforementioned program should be implemented.

PROPOSED PROCEDURES TO BE UTILIZED TO IMPLEMENT THE LEARNING PROGRAM ENVISIONED FOR THE "MIDDLE SCHOOL OR EXPLORATORY YEARS".

a. The Superintendent, Principal and one school board member should make an on-site visit to the following school. The above should be completed by December 1, 1969.

The Arable Park Middle School
Chalmette, Louisiana
Mrs. Marie Luguet, Principal

b. The Principal should work with Dr. Morris Osburn and design a schedule that will utilize 3 learning interest centers for middle school children. The above schedule must incorporate the following and should be completed by January 1, 1970.

(1) A schedule wherein the children may complete work in the areas of science, math, language arts, music, art, physical education, typing, in both the Applied Skills Division of the elementary school and the program offered at the high school level.

c. The teachers to be included as the instructional staff for the above program should, before February 1, 1970, be made aware of the above program and schedule.

d. Between March 1, 1970 and July 1, 1970, the Principal, Superintendent and Instructional Staff of the middle school program should participate in a five day workshop that will include a component featuring "t" group activity and sensitivity training laboratory experiences.

e. In July of 1970, the Principal should prepare a check list identifying curricular areas offered the middle school children that will be enrolled in the school for the 1970-71 school year. The above check list should be made available to the students. The students should complete same and return to the Principal before August 1, 1970.

f. In August of 1970, the Principal should develop a schedule for the students that will insure each child an opportunity to spend at least 2 1/2 hours a day in their paramount or prime interest areas. The schedule should also insure that each student will be able to have exploratory experiences in as many areas as offered in the total school program.

g. In August of 1970, the Principal, with the help of maintenance personnel, should move the subject matter material into three designated learning centers for the middle school.

h. In August of 1970, the Principal and Instructional Staff for the middle school, should review the space, materials, and students schedule to insure that each staff member knows and fully understands the concepts undergirding the program and comprehends the student schedule.

i. In September of 1970, the above program should be implemented.

PROPOSED ACTION STRATEGIES TO BE UTILIZED TO IMPLEMENT THE 9 WEEK MODULE SCHEDULE FOR HIGH SCHOOL STUDENTS

Through a series of conferences between the Superintendent, the Principal and Dr. Morris Osburn, a high school program was designed for implementation this 1969-70 school year. Mr. Bernard, the Principal for the High School, oriented the instructional staff as to the conceptual framework for the program during the spring and summer of 1969. Mr. Bernard assigned the students into the program in August of 1969 and the program is presently in operation. The action strategies utilized to implement the program was designed to complete the following tasks:

1. Examine the 9 week semester concept in the following context.

a. Review and examine a traditional high school program in terms of teacher responsibilities in the areas of pupil load, subject matter presentation, teacher planning, student preparation, utilization of existing material, student acquisition of knowledge, student acquisition of inquiry, research, and independent study skills.

b. Determine if a 9 week schedule in terms of school day, and school year offers the student and teacher greater opportunity to interact and complete tasks relative to the areas listed in part a above.

c. Design a schedule wherein each child will take one solid subject for a 9 week period, spend 3 1/2 hours per day in one subject and work in a continuous block time of 1 1/2 hours per day in the one solid subject.

d. Design a schedule wherein teachers will not have to teach as many children as he or she did the year before and not, in one day, be responsible for as many children as he or she did the year before.

e. Orient the teachers to the conceptual framework of the 9 week semester school.

f. Implement the program.

A REVIEW OF THE DELIVERY SYSTEM PROPOSED HEREIN

Those concerned with the education of children at the elementary and seconday level are acutely aware that the system or organization must work for the child. Stated in other terms, the teacher, teaching time, space and facilities, learning materials, and the external environmental agencies affecting the internal operation of a school, must be prioritized to support the learner as he or she progresses through the formal or designed structure. Contiguous with the above, the ESEA, Title III Project Staff and Consultants for the Improvement of the Administration and Management of the Curriculum, have presented a "new delivery system" that includes a structure wherein the following basic support arrangement can be implemented for the children enrolled in the Cloverport School District.

1. A Teacher-Pupil relationship made more compatible by a realistic utilization of personnel time, materials, and space. Hopefully, the above will be implemented through the following activities.

a. An in-service program for both administrative and instructional personnel that deals with the human skills needed on the part of the total staff to more effectively relate to children.

b. A visitation program on the part of administrative and instructional personnel that will allow the above to become more familar with similar programs that offer promise for students that must deal with a technological dehumanized environment.

c. A stronger utilization of materials in grades 1 through 8 by placing materials in learning centers.

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d. A program designed to allow the pupil to progress at his or her own rate.

e. A program designed to allow teachers to work and plan together as well as "teach" a greater amount of time in their strength areas.

f. A program designed to provide children a more flexible use of time correspondent to their measured needs and expressed interests.

g. A program wherein the number of children that the high school teacher manages in a given day is smaller than that found in most schools now operating under a "so-called" traditional program.

h. A program designed to allow a more realistic approach to a student control over his homework and class work preparation.

i. A program designed to provide students the opportunity to become involved in independent study and in-depth study in various areas of the curriculum.

There is nothing expensive about the program envisioned. Students should, after they have been involved in the program a short time, use more learning material than ever before. Correspondent to the above as reported by Mr. McKee and Dr. Glatt, the Cloverport Board of Education and the Superintendent, should examine the following areas.

1. The present grading practices pursued by the instructional staff;

2. The educational program offered low ability children;

3. The need for a staff development program that will include sensitivity training and "T" group activity;

4. The need to appoint a part time person to work with program development with initial focus on the above, item 3;

5. The need to consider a merger with Breckinridge County if the growth projections made herein proves to be erroneous and conduct another review of student population increase projections.

Hopefully, the educational program proposed includes an action approach to meet the needs implied by Mr. McKee and Dr. Glatt. Only time will determine the approach those responsible for the administration of the program should take regarding Dr. Glatt's projections. Those reviewing this document must realize that the ESEA, Title III Project Staff has not pursued a course of action that would involve recommendations concerning merger. This document is primarily concerned with presenting a proposal for a new and more effective educational system. The growth factor is only one consideration or component included in the document. If Cloverport experiences a "boom growth", regardless of merger and if there continues to be a high school in Cloverport, it seems apparent that there must be provisions for a secondary facility. The next component of this document is based upon the possibility that growth would occur and a new high school would need to be constructed.

PROJECTED DELIVERY SYSTEM OF EDUCATION FOR CLOVERPORT: BASED ON GROWTH

In the event Cloverport experiences great growth and if there is a need to build a high school, the following is recommended as consideration for same:

1. The present 1-12 facility be retained as a 1-5 learning center - completely renovated;

2. A middle school - grades 6-8 be built on a new site;

3. A new high school be built on the banks of the Ohio on land donated by the city. The school should probably be built at the end of the land envisioned as that being used for a park-marina.

4. The high school be part of a High Rise Structure with the floors below and adjacent to, the school being utilized as office space, motel, restaurant, little theatre, gymnasium and cultural arts center.

For the Cloverport School Board to consider the development of a high school facility that also serves as a community facility, it is recommended that the officials of the city, the school board, and the Superintendent, secure a consultant and direct him to examine the legality and feasibility of city government and the school board to jointly finance a High Rise facility that will include the above.

The High Rise is proposed because if population growth comes to the area referred to by Dr. Glatt, there is no guarantee that it will be growth that will provide a financial base wherein the school officials of Cloverport under an independent school district, can secure land and provide housing both at the same time. The "High Rise" is proposed regardless of the decision to merge or not merge. In today's social setting, the utilization of air space may be the most realistic way to both increase and provide housing for an expanding student population. Most certainly few can deny that a "High Rise" on the banks of the Ohio that houses a learning center, provides office space, includes a motel, and covers a cultural arts center, would prove to be a "Total Environmental Learning Center". The above "Center" could become a "proto-type", a fresh approach, a realistic and innovative venture for the local community, the adjoining region, the state and the nation to examine. Contiguous with the above, the aforementioned delivery system proposed, should be utilized in any school now in existence or proposed for the future in Cloverport.

SUMMARY

The Cloverport Independent School District faces a challenge that few school districts have an opportunity to confront. The school officials, through exploratory conferences with the personnel that prepared this document, have expressed a desire to initiate activities that will hopefully provide the children of Cloverport a new delivery system of educational experiences. The "New System" proposed is not complicated - it is based on limited "hard data" that seems to be relevant to the situation. Those responsible for education in Cloverport, including city officials, should see to it that each child has the opportunity to progress at his or her own rate, on a continuous basis. Also, teachers, time, material, and space should work for the students' progress, not inhibit growth on the part of the student.

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APPENDIX

9 WEEK MODULE SCHEDULE
CLOVERPORT INDEPENDENT SCHOOL DISTRICT
FREDERICK FRAIZE HIGH SCHOOL

The first nine weeks - the same basic subject matter will be offered each nine weeks with the actual content or subject changing each nine weeks.

Students are required to remain in one time block for 1½ hours daily	Ist year English 1½ hours (required)	Math 1½ hours (required)	Social Studies 1½ hours (required)	Science 1½ hours (required)
This block of time may be taken at any time during the day and in any time module desired by the student	English 2 hours	Math 2 hours	Social Studies 2 hours	Science 2 hours

The school day will begin at 8 a.m. and end at 3 p.m. with a one-half hour lunch period. It may be seen that the student will have available to him three hours to schedule electives, residuals, and in-depth study.

Total Offerings by Areas:

English - I, II, III, IV, Speech, Drama, Honors
Math - General Math I, II, Algebra I, II, Geometry, Trigometry
Science - General Science. Biology, Chemistry, Physics
Social Studies - World History, World Georgraphy, U.S. History
Civics, Government, International Relations

Business - Typing, Business Practices, Bookkeeping, Shorthand
Language - Latin I, II
Home Economics - I, II, III, IV
Art - I, II
Driver Education
Health and Physical Education

A TYPICAL SCHEDULE FOR A HIGH SCHOOL STUDENT MAY BE AS SHOWN BELOW:

Ist Semester	2nd Semester	3rd Semester
8:00 to 9:30 English	8:00 to 9:30 Math	8:00 to 9:30 Social Studies
9:30 to 10:30 H.P.E.	9:30 to 10:30 Art	9:30 to 10:30 H.P.E.
10:30 to 11:30 English	10:30 to 11:30 Math	10:30 to 11:30 Social Studies
11:30 to 12:00 Lunch	11:30 to 12:30 H.P.E.	11:30 to 12:00 Free Time
12:00 to 1:00 Art	12:30 to 1:00 Lunch	12:00 to 12:30 Lunch
1:00 to 2:00 English	1:00 to 2:00 Math	12:30 to 1:00 Social Studies
2:00 to 3:00 Typing	2:00 to 3:00 Typing	1:00 to 2:00 Art
		2:00 to 3:00 Social Studies

4th Semester
8:00 to 9:30 Science
9:30 to 10:30 Science
10:30 to 11:30 Speech
11:30 to 12:00 Free Time
12:00 to 12:30 Lunch
12:30 to 1:30 Science
1:30 to 2:30 Art
2:30 to 3:00 Free Time

APPENDIX

Tentative Schedule
Basic Skills Division
Cloverport Elementary School
1-2-3 Year Children

		Cultural Arts	Math-Science Center
8:15 to 8:30	Ist yr. children Opening Ceremonies	Levels 1-3-5-7-9 Opening Ceremonies	Levels 2-4-6-8-10 Opening Ceremonies
8:30 to 9:15	Language Arts Center Ist year students	Cultural Arts Social Studies Center Levels 1-3-5-7-9	Math-Science Center Levels 2-4-6-8-10
9:15 to 9:45		Free Time - Recess	
9:45 to 11:00	Language Arts Center Levels 2-4-6 8-10 Resource Center	Cultural Arts Social Studies Center Ist Year students	Math-Science Center Levels 1-3-5-7-9
11:05 to 11:40	Lunch	Lunch	Lunch
11:45 to 12:50	L.A. Center Levels 3-5-1 Resource Center 7-9	Cultural Arts Social Studies Center Levels 2-4-6-8-10	Math-Science Center Ist year students
12:50 to 1:00	FREE TIME		
1:05 to 1:50	L.A. Center Levels 8-10-7-9 Resource Center 5-6	C.A. & S.S. Center Ist year students	Math-Science Center Levels 1-2-3-4

APPENDIX

Basic Skills Division

Cont'd

	L.A. Center	C.A. & S.S. Center	M & S. Center
1:55 to 2:45	Ist year students	Levels 1-3-5-7-9	Levels 2-4-6-8-10

DISMISS

APPENDIX

Tentative Schedule
Applied Skills Division
Cloverport Elementary School
4-5-6 Year Students

	Language Arts Center	Cultural Arts Social Studies Center	Math-Science Center
8:15 to 8:30	Opening Ceremonies Levels 15-18-19	Opening Ceremonies Levels 12-16-17	Opening Ceremonies Levels 11-13-14
8:30 to 9:45	L.A. Center Levels 18-19 15-Resource Center	C.A. & S.S. Center Levels 12-16-17	M & S Center Levels 11-13-14
9:50 to 10:05	L.A. Center Levels 13-14 11-Resource Center	C.A. & S.S. Center Levels 18-19-15	M & S Center Levels 12-16-17
10:05 to 10:30	FREE TIME AND RECESS		
10:30 to 11:45	L.A. Center Levels 16-17 12-Resource Center	C.A. & S.S. Center Levels 11-13-14	M & S Center Levels 18-19-15
11:40 to 12:40	LUNCH		
12:45 to 1:30	L.A. Center Levels 12-11 19-Resource Center	C.A. & S.S. Center Levels 16-18-13	M & S Center Levels 14-15-17

APPENDIX

Applied Skills Division

Cont'd

	Language Arts Center	Cultural Art Social Studies Center	Math-Science Center
1:30 to 2:35	Levels 11, 12, 15	Levels 19-14-17	Levels 16-18-13

A MODEL FOR ASSESSING EDUCATIONAL SUCCESS IN KENTUCKY SCHOOLS

SUBMITTED
BY
WILLIAM G. KATZENMEYER
DUKE UNIVERSITY

AND

BERT I. GREENE
EASTERN MICHIGAN UNIVERSITY

SUBMITTED
TO

ESEA TITLE III PROJECT TO IMPROVE THE
ADMINISTRATION AND MANAGEMENT OF
THE CURRICULUM IN KENTUCKY

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A MODEL FOR ASSESSING EDUCATIONAL SUCCESS IN KENTUCKY SCHOOLS

BY

WILLIAM G. KATZENMEYER
DUKE UNIVERSITY

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EASTERN MICHIGAN UNIVERSITY

AT THE OUTSET, IT SHOULD BE NOTED THAT THE MAJOR EMPHASIS OF THIS REPORT RESTS ON THE DEVELOPMENT OF AN APPROPRIATE MODEL FOR EVALUATING AND DESCRIBING EDUCATIONAL SUCCESS. PRIOR TO THIS ENDEAVOR, ONE OF THE METHODS USED WAS TO EXAMINE THE AVERAGE PERFORMANCE OF PUPILS IN A SPECIFIC SCHOOL DISTRICT ON A STANDARDIZED TEST AND THEN COMPARE THIS PERFORMANCE WITH NATIONAL NORMS. HOWEVER USEFUL THIS PROCEDURE MIGHT BE, IT OVERLOOKS THE FACT THAT NOT ALL PUPILS HAVE THE SAME ENDOWMENT; THEREFORE, THEY DO NOT ALL BEGIN AT THE SAME STARTING POINT. TO MEASURE ACHIEVEMENT AT ANY POINT IN TIME TENDS TO FAVOR THOSE SCHOOL DISTRICTS WHICH EMBODY PUPILS OF HIGHER INTELLIGENCE. IN NO WAY DOES THIS TYPE OF ASSESSMENT INDICATE HOW EFFECTIVE THE SCHOOL DISTRICT IS IN WORKING WITH THE PUPILS.

STILL ANOTHER FACTOR RELATING TO QUALITY EDUCATION ENTERS THE PICTURE AT THIS POINT. IT HAS LONG BEEN THOUGHT, AND THERE IS RESEARCH EVIDENCE TO SUPPORT THIS POINT OF VIEW, THAT CERTAIN FACTORS SUCH AS: TEACHERS' SALARIES, DROPOUT RATE, CLASS LOAD, IN-SERVICE EDUCATION, ANNUAL EXPENDITURE PER PUPIL, AND OTHER SUCH VARIABLES HAVE A DIRECT BEARING ON THE QUALITY OF EDUCATION IN ANY SCHOOL DISTRICT.

BACKGROUND

IN MAY, 1967, THE AUTHORS VISITED AND CONSULTED WITH MEMBERS OF THE STATE DEPARTMENT OF EDUCATION OF THE COMMONWEALTH OF KENTUCKY. AT THAT TIME, THE PURPOSES OF OUR VISIT WERE AS FOLLOWS:

1. TO SUGGEST A METHOD BY WHICH IT COULD BE DETERMINED WHETHER OR NOT CERTAIN FACTORS SUGGESTED IN A PREVIOUS STUDY BY CRESAP, MCCORMICK AND PAGET[1] WOULD BE USEFUL IN IDENTIFYING QUALITY INSTRUCTIONAL PROGRAMS.
2. TO EXAMINE THE DATA WHICH ARE CURRENTLY BEING COLLECTED TO SEE HOW THEY MIGHT BE USED FOR PURPOSES OF GENERAL EVALUATION OF THE SCHOOL DISTRICTS IN THE PILOT TESTING PROGRAM.
3. TO PROVIDE A SOUND AND WORKABLE PLAN FOR THE UTILIZATION OF THESE DATA.
4. TO SUGGEST STATISTICAL PROCEDURES FOR USE IN THIS PROJECT.

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[1] CRESAP, MCCORMICK AND PAGET, EVALUATION OF PUBLIC EDUCATION IN KENTUCKY. STUDY REPORT SUBMITTED TO THE KENTUCKY COMMISSION ON PUBLIC EDUCATION, 1964.

TESTING PROGRAM

AT THE TIME OF THIS VISIT, THE STATE TESTING PROGRAM HAD JUST BEEN INITIATED IN THE COMMONWEALTH OF KENTUCKY. AT THAT TIME, WE COMMENTED THAT IF A TESTING PROGRAM WAS TO BE OF VALUE IN EXAMINING HOW WELL THE PUBLIC SCHOOLS ARE DOING IT MUST BE MORE THAN A PROGRAM WHICH IS CARRIED OUT ONCE A YEAR. WE NOTED THAT MERELY TESTING PUPILS ON ACHIEVEMENT TESTS WOULD NOT NECESSARILY BE HELPFUL IN MAKING EVALUATIVE COMMENTS REGARDING THE QUALITY OF THE SCHOOL EFFORT. WE FELT THEN, AND WE HOLD THIS FEELING TODAY, THAT IT WOULD BE GROSSLY UNFAIR AND PERHAPS WHOLLY INACCURATE TO MAKE JUDGEMENTS BASED SOLELY ON ACHIEVEMENT DATA. THIS PROCEDURE WOULD MERELY POINT OUT THE SCHOOL DISTRICTS WHERE THE STUDENTS HAD HIGH PERFORMANCE. IT WOULD NOT NECESSARILY IDENTIFY THE SCHOOL DISTRICTS WHICH WERE DOING THE BEST THAT COULD BE EXPECTED. THIS IS PERHAPS A SUBTLE CONCEPT, BUT ONE COULD EXPECT THAT SCHOOL DISTRICTS WHICH DRAW STUDENTS FROM RELATIVELY HIGH SOCIO-ECONOMIC STRATA WOULD ALSO HAVE THE STUDENTS WITH THE HIGHEST PERFORMANCE ON A STANDARDIZED TEST. IN EDUCATION, WE ARE MORE LIKELY TO DEFINE A 'GOOD JOB' IN TERMS OF HOW WELL SCHOOL DISTRICTS PERFORM THEIR OBLIGATIONS IN RELATION TO THE STUDENTS THEY SERVE. THEREFORE, A GOOD SCHOOL DISTRICT IS ONE WHICH HELPS EACH STUDENT ACHIEVE AS MUCH AS POSSIBLE IN RELATION TO HIS POTENTIAL.

IT WAS IN THIS SETTING, AND WITH THE ABOVE ISSUES IN MIND THAT THE AUTHORS UNDERTOOK THE DESIGN AND CONDUCT OF THE STUDY REPORTED HEREIN.

THE STUDY DESIGN

STATEMENT OF PROBLEM

THE PURPOSE OF THIS STUDY IS TO DESIGN A PROCEDURE TO DETERMINE THE EDUCATIONAL SUCCESS OF PUPILS IN KENTUCKY SCHOOLS. IN OTHER WORDS, THIS STUDY SHOULD PROVIDE A METHOD WHEREBY MEMBERS OF THE DEPARTMENT OF EDUCATION, SCHOOL SUPERINTENDENTS, AND OTHER INTERESTED PERSONS COULD ASSESS THE EFFECTIVENESS OF THE SCHOOLS.

ANOTHER PURPOSE OF THIS STUDY IS TO DETERMINE WHETHER OR NOT THE FACTORS SUGGESTED BY THE CRESAP, MCCORMICK AND PAGET STUDY CAN PROVIDE INFORMATION VALID FOR USE AS AN OVERALL INDICATION OF QUALITY IN THE SCHOOLS. THESE FACTORS ARE GIVEN IN TABLE 1.

MORE SPECIFICALLY, THIS STUDY WILL ANSWER THE FOLLOWING QUESTIONS:

1. WHICH, IF ANY, OF THE ABOVE FACTORS ARE USEFUL IN PREDICTING WHICH SCHOOL DISTRICTS HAVE THE HIGHEST LEVEL OF STUDENT PERFORMANCE IN RELATION TO INTELLIGENCE.
2. TO WHAT EXTENT ARE THE VARIOUS FACTORS INDEPENDENT IN PREDICTING EDUCATIONAL SUCCESS.
3. WHAT COMBINATION OF THESE FACTORS WILL LEAD TO THE BEST PREDICTION OF EDUCATIONAL SUCCESS?

TABLE 1

LIST OF FACTORS

ANNUAL CURRENT EXPENSES PER PUPIL IN A.D.A.

ANNUAL AVERAGE SALARIES FOR CLASSROOM TEACHERS

PER CENT SUPPLEMENT BY DISTRICT FOR TEACHERS' SALARIES

PER CENT OF TEACHERS HOLDING M.A. DEGREE OR HIGHER DEGREE

PER CENT OF NINTH GRADERS COMPLETING HIGH SCHOOL

ATTENDANCE

LOCAL FINANCIAL INDEX

PER PUPIL COST FOR EDUCATIONAL SUPPLIES AND BOOKS

AVERAGE NUMBER OF PUPILS PER TEACHER

NUMBER OF PUPILS PER ADMINISTRATOR

NUMBER OF TEACHERS PER ADMINISTRATOR

COST PER PUPIL FOR ADMINISTRATIVE SERVICES

PER CENT OF PUPILS RETAINED IN THE SAME GRADE

PER CENT OF HIGH SCHOOL CLASSES TAUGHT BY TEACHERS OUT OF THEIR FIELD

DAYS OF IN-SERVICE EDUCATION PROGRAMS OVER A FIVE YEAR PERIOD

PER CENT OF TOTAL PUPILS FOR WHOM SPECIAL VOCATIONAL PROGRAMS ARE PROVIDED

4. HOW DO THE THIRTY-ONE SCHOOL DISTRICTS IN THE STATE TESTING PROGRAM RANK ON THE FACTOR OF EDUCATIONAL SUCCESS?

DEFINITIONS

THERE IS ONE TERM THAT WILL BE USED FREQUENTLY IN THIS REPORT WHICH NEEDS TO BE DEFINED. THE TERM IS "EDUCATIONAL SUCCESS," AND THE DEFINITION HAS BEEN HINTED IN PREVIOUS MATERIAL. IN DISCUSSING THE TESTING PROGRAM, WE NOTED THAT A GOOD SCHOOL DISTRICT IS ONE WHICH HELPS EACH STUDENT ACHIEVE AS MUCH AS POSSIBLE IN RELATION TO HIS POTENTIAL. THIS CONCEPT IS THE DEFINITION USED IN THIS REPORT AND WILL BE REFERRED TO AS EDUCATIONAL SUCCESS.

RESEARCH SITE AND POPULATION

THE DATA USED IN THIS STUDY AND IN THE DEVELOPMENT OF THIS MODEL WERE PROVIDED BY THE STATE DEPARTMENT OF EDUCATION. THESE TEST DATA WERE OBTAINED FROM THE PILOT TESTING PROGRAM CONDUCTED BY THE DEPARTMENT OF EDUCATION DURING THE 1966-67 SCHOOL YEAR.

THESE DATA WERE OBTAINED FROM 14,371 PUPILS IN GRADES 4,8, AND 11 IN THIRTY-ONE SELECTED SCHOOL DISTRICTS IN THE COMMONWEALTH OF KENTUCKY. OF THIS TOTAL, 5,419 PUPILS (37.7%) WERE IN THE FOURTH GRADE; 5,064 PUPILS (35.2%) WERE IN THE EIGHTH GRADE; AND 3,888 PUPILS (27%) WERE IN THE ELEVENTH GRADE.

TEST INSTRUMENTS

THE TESTS USED IN THE PILOT TESTING PROGRAM, AND THOSE INSTRUMENTS UPON WHICH THESE ANALYSES ARE BASED ARE:

CALIFORNIA SHORT FORM TEST OF MENTAL MATURITIES
(1963 NORMS)

AND

CALIFORNIA ACHIEVEMENT TEST - COMPLETE BATTERY
(1963 NORMS)

METHODOLOGY

THE DATA WERE AVAILABLE WHEN THE AUTHORS UNDERTOOK THIS STUDY; THEREFORE, NO ADDITIONAL DATA WERE COLLECTED. THE AUTHORS WERE INTERESTED IN THE REGRESSION OF ACHIEVEMENT ON I.Q. THIS PROCEDURE PROVIDES A METHOD OF COMPARING SCHOOL DISTRICTS IN TERMS OF THEIR EFFECTIVENESS IN GETTING THE HIGHEST ACHIEVEMENT FROM PUPILS IN RELATION TO THEIR ABILITY LEVEL. THUS, IT PROVIDES A METHOD OF COMPARING THE PERFORMANCE OF PUPILS IN VARIOUS SCHOOL DISTRICTS.

THE TESTING OF THE MODEL WHICH WAS DEVELOPED AS A PART OF THIS STUDY PROVIDED THE OPPORTUNITY TO EXAMINE THE SIXTEEN VARIABLES IN RELATION TO QUALITY RANKING. THAT IS, WE ARE ABLE TO DEFINE WHICH OF THE VARIABLES PROVED TO BE MOST USEFUL IN DETERMINING EDUCATIONAL SUCCESS.

ANALYSIS OF THE DATA

THE DEVELOPMENT OF SEVERAL COMPUTER PROGRAMS WAS UNDERTAKEN. THESE INVOLVED THE ANALYSIS OF COVARIANCE, WHICH PRODUCED THE ADJUSTED AVERAGE, AND A MULTIPLE REGRESSION PROGRAM, WHICH ALLOWED FOR THE EXAMINATION OF THE PREDICTIVE VALUE OF EACH OF THE SIXTEEN VARIABLES ON THE ADJUSTED AVERAGE.

LIMITATIONS OF THE STUDY

IT WOULD BE IMPORTANT THAT THE READER RECOGNIZE SOME OF THE LIMITATIONS IMPOSED ON THIS STUDY. IN LARGE MEASURE, THE RESEARCHERS STATE THESE LIMITATIONS AS CAUTIONS TO BE OBSERVED WHEN INTERPRETING THE DATA.

ONE OF THE LIMITATIONS WHICH MUST BE ACKNOWLEDGED IS THAT OF THE DATA. IT WAS NOTED EARLIER THAT THESE DATA WERE PRESENTED TO US, AND THEY WERE OBTAINED DURING THE FIRST YEAR OF A PILOT TESTING PROGRAM. WE RECOGNIZE THAT THERE ARE MANY MECHANICAL DIFFICULTIES INVOLVED IN INITIATING A NEW PROGRAM. THEREFORE, THE READER SHOULD KEEP THIS IN MIND WHEN REVIEWING THE RESULTS.

THE INTERPRETATION OF THESE DATA ARE ONLY AS RELIABLE AS THE DATA THEMSELVES. SINCE WE ACKNOWLEDGE SOME OF THE DIFFICULTIES OF INITIATING A NEW TESTING PROGRAM, WE ALSO ACKNOWLEDGE SOME INACCURACIES WHICH MAY BE INHERENT IN

ALL TEST DATA. THE MAJOR PURPOSE OF THIS STUDY, HOWEVER, WAS THE DEVELOPMENT OF AN EVALUATIVE PROCEDURE THAT COULD BE USED BY DEPARTMENT OF EDUCATION PERSONNEL. THEREFORE, WE ARE MAINLY CONCERNED WITH THE EVALUATIVE PROCEDURE. THE DATA PRESENTED HEREIN SHOULD BE VIEWED AS BEING ILLUSTRATIVE OF HOW THIS EVALUATIVE PROCEDURE CAN BE USED. WE ARE NOT PREPARED TO DRAW ANY CONCLUSIONS ABOUT THE QUALITY OF EDUCATION IN KENTUCKY ON THE BASIS OF THE DATA USED IN THIS STUDY.

FINDINGS

BEFORE PRESENTING THE FINDINGS, IT MIGHT HELP THE READER INTERPRET THESE DATA IF WE REVIEWED THE BASIC CONCEPT OF THE STATISTICAL PROCEDURE USED IN THIS REPORT.

IN A TYPICAL RESEARCH SETTING WHERE ONE WHSHES TO TEST THE IMPACT OF AN EXPERIMENTAL VARIABLE ON THE OUTCOME, CERTAIN PROCEDURES WOULD HAVE TO BE FOLLOWED. FOR EXAMPLE, IF A TEACHER WERE TO ATTEMPT TO TEACH SPELLING BY TWO DIFFERENT METHODS, IT WOULD BE IMPORTANT THAT THE RESULTS OF TEACHING COULD BE MEASURED. FURTHERMORE, THE TEACHER WOULD PROBABLY ACKNOWLEDGE THAT GENERAL INTELLIGENCE, ACHIEVEMENT, OR APTITUDE FOR SPELLING COULD INFLUENCE THE RESULTS. THEREFORE, IN ORDER TO BE CERTAIN THAT THE TEST RESULTS WILL NOT BE CONTAMINATED BY ANY OF THESE VARIABLES, THE RESEARCHER WOULD ESTABLISH TWO GROUPS OF STUDENTS WITH EACH GROUP HAVING

APPROXIMATELY THE SAME I.Q., ACHIEVEMENT, AND APTITUDE. UNDER THIS CONDITION, ONE GROUP WOULD BE CALLED "EXPERIMENTAL" AND THE OTHER WOULD BE CALLED THE "CONTROL" GROUP. THE PURPOSE OF THIS EXPERIMENTAL DESIGN IS TO INSURE THAT THE RESULTS OBSERVED MAY BE ATTRIBUTED, WITHIN THE LIMITS OF ERROR, TO THE TREATMENT VARIABLE (IN THIS INSTANCE, METHOD OF TEACHING SPELLING) AND TO NO OTHER CIRCUMSTANCE. THUS, THE MATCHING OF STUDENTS IS AN EXPERIMENTAL PROCEDURE WHICH PROVIDES FREEDOM FROM BIAS.

HOWEVER, IT IS NOT ALWAYS POSSIBLE, BECAUSE OF THE PRACTICAL LIMITATIONS ASSOCIATED WITH THE CONDUCT OF EXPERIMENTS, TO HAVE MATCHED GROUPS. IN THIS CASE, A STATISTICAL RATHER THAN AN EXPERIMENTAL METHOD MAY BE USED TO "CONTROL" OR ADJUST FOR THE EFFECTS OF ONE OR MORE UNCONTROLLED VARIABLES AND THEREBY PERMIT A VALID EVALUATION OF THE OUTCOMES OF THE EXPERIMENT. THIS STATISTICAL PROCEDURE IS CALLED ANALYSIS OF COVARIANCE.

IN THE STUDY REPORTED HEREIN, WE ARE CONCERNED ABOUT THE EFFECTS OF TREATMENTS UPON ACHIEVEMENT. WE ALSO ACKNOWLEDGE THAT INTELLIGENCE IS A FACTOR THAT HAS MAJOR IMPACT ON ACHIEVEMENT. IT IS THEREFORE REASONABLE TO ASSUME THAT AS INTELLIGENCE INCREASES, THE LEVEL OF ACHIEVEMENT ALSO INCREASES. THE REAL TEST OF THE EFFECTIVENESS OF THE VARIOUS TREATMENTS WOULD COME WHEN THE ACHIEVEMENT SCORES

HAVE BEEN "ADJUSTED" TO REMOVE THE EFFECTS OF INTELLIGENCE. THAT IS, IF THE IMPACT OF INTELLIGENCE IS REDUCED TO ZERO, WE CAN THEN TEST THE DIFFERENCES OF THE SCHOOL DISTRICTS ON THE FACTOR OF ACHIEVEMENT. IN A VERY REAL SENSE, WHAT HAS BEEN DONE IS TO CONTROL THE FACTOR OF INTELLIGENCE STATISTICALLY WHERE IT COULD NOT BE CONTROLLED EXPERIMENTALLY. IN EFFECT, THIS PROCEDURE REDUCED INTELLIGENCE TO A POINT WHERE IT IS THE SAME FOR ALL SCHOOL DISTRICTS.

THE ABOVE EXPLANATION HAS BEEN USED TO DEFINE ANALYSIS OF COVARIANCE IN SIMPLE TERMS. IN DOING SO, WE HAVE TAKEN SOME LIBERTIES WITH THE TERMINOLOGY. SOME STATISTICIANS MIGHT OBJECT TO OUR USE OF THE LANGUAGE, BUT WE BELIEVE IT IS JUSTIFIED IF THE CONCEPT HAS BEEN CLARIFIED.

FOURTH GRADE DATA

TABLE 2 PRESENTS DATA ON THE AVERAGE ABILITY AND AVERAGE ACHIEVEMENT OF FOURTH GRADE PUPILS FOR EACH OF THE THIRTY-ONE SCHOOL DISTRICTS IN THIS STUDY.

FROM THIS TABLE, IT CAN BE SEEN THAT THE AVERAGE ABILITY (AS MEASURED BY THE CALIFORNIA TEST OF MENTAL MATURITIES, 1963) VARIES SLIGHTLY FROM ONE SCHOOL DISTRICT TO ANOTHER. HOWEVER, THE AVERAGE OF ALL THIRTY-ONE SCHOOL DISTRICTS IS VERY CLOSE TO THE NATIONAL AVERAGE. SIMILARLY, THE AVERAGE ACHIEVEMENT OF EACH SCHOOL DISTRICT IS ALSO VARIED. HERE ONE CAN NOTE GREATER VARIATION AMONG SCHOOL

TABLE 2

AVERAGE ABILITY AND AVERAGE ACHIEVEMENT BASED ON DATA FROM FOURTH GRADE PUPILS

DISTRICT	AVE. ABILITY	AVE. ACH.
ALLEN COUNTY	104.14	69.62
ASHLAND IND.	104.77	61.21
BOYD COUNTY	102.94	64.64
BOYLE COUNTY	98.46	61.78
BREATHITT COUNTY	93.87	52.05
CAMPBELLSVILLE IND.	98.81	59.97
CARLISLE COUNTY	105.56	66.84
CLAY COUNTY	92.06	58.62
CORBIN IND.	103.92	67.44
EDMONSON COUNTY	93.10	54.72
ELIZABETHTOWN IND.	106.29	69.38
EMINENCE IND.	93.30	61.58
FAIRVIEW IND.	102.96	63.91
GRAYSON COUNTY	93.66	56.72
HAZARD IND.	101.23	63.05
JESSAMINE COUNTY	100.27	61.06
LEITCHFIELD IND.	102.69	68.40
MARTIN COUNTY	88.27	49.00
MASON COUNTY	98.01	54.66
MAYSVILLE IND.	97.60	51.54
MURRAY IND.	106.55	72.56
NELSON COUNTY	97.60	64.84
PADUCAH IND.	103.34	64.68
PARIS IND.	101.54	67.46
SCOTTSVILLE IND.	99.70	64.91
SPENCER COUNTY	101.42	72.18
TAYLOR COUNTY	101.68	57.70
TRIGG COUNTY	93.24	54.04
WHITLEY COUNTY	90.44	50.81
WILLIAMSBURG IND.	99.65	51.18
WOODFORD COUNTY	99.02	63.13

DISTRICTS IN ACHIEVEMENT THAN WAS NOTED IN ABILITY. THIS IS NOT UNUSUAL, BUT RATHER TO BE EXPECTED. IN FACT, THIS IS THE CRITERION MEASURE FOR EDUCATIONAL SUCCESS.

TABLE 3 CONTAINS THE ADJUSTED AVERAGE ACHIEVEMENT OF THE THIRTY-ONE SCHOOL DISTRICTS IN THE STUDY BASED ON THE PERFORMANCE DATA OBTAINED FROM FOURTH GRADE PUPILS. THIS ADJUSTED AVERAGE ACHIEVEMENT IS THE DIRECT RESULT OF THE ANALYSIS OF COVARIANCE. THIS INFORMATION PROVIDES THE BEST ESTIMATE OF THE AVERAGE ACHIEVEMENT IN THE SCHOOL DISTRICT IF THE AVERAGE ABILITY IS 99.03.

FROM THIS TABLE, IT CAN BE NOTED THAT THERE IS SOME VARIATION FROM ONE DISTRICT TO THE NEXT. IN FACT, THE SCHOOL DISTRICT WITH THE HIGHEST ADJUSTED ACHIEVEMENT (EMINENCE) HAD ONE OF THE LOWEST MEASURES OF AVERAGE ABILITY (TABLE 1). THIS WOULD INDICATE THAT THIS SCHOOL DISTRICT IS DOING A "GOOD JOB" GIVEN PUPILS OF BELOW AVERAGE ABILITY. THAT IS, IN COMPARISON TO ABILITY, THIS SCHOOL DISTRICT IS ACHIEVING A HIGH DEGREE OF EDUCATIONAL SUCCESS WITH ITS PUPILS. ON THE OTHER HAND, THE ELIZABETHTOWN DISTRICT, WHOSE PUPILS AVERAGE 13 I.Q. POINTS MORE THAN THE EMINENCE DISTRICT, IS NOT DOING QUITE AS WELL IN TERMS OF EDUCATIONAL SUCCESS. ONE COULD REASONABLY EXPECT THAT PUPILS IN THE ELIZABETHTOWN DISTRICT WOULD ACHIEVE AT A HIGHER LEVEL BECAUSE THEIR INITIAL INTELLECTUAL ENDOWMENT IS HIGHER. A LOOK AT THE COLUMN "AVERAGE ACHIEVEMENT" IN TABLE 1 REVEALS THAT THIS

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TABLE 3

ADJUSTED AVERAGE ACHIEVEMENT BY RANKS BASED ON DATA FROM FOURTH GRADE PUPILS

DISTRICT	ADJUSTED AVERAGE
SPENCER COUNTY	69.70
EMINENCE IND.	67.30
NELSON COUNTY	65.89
CLAY COUNTY	65.58
MURRAY IND.	65.05
PARIS IND.	64.94
LEITCHFIELD IND.	64.73
ALLEN COUNTY	64.51
SCOTTSVILLE IND.	64.24
WOODFORD COUNTY	63.13
CORBIN IND.	62.55
BOYLE COUNTY	62.35
ELIZABETHTOWN IND.	62.12
GRAYSON COUNTY	62.09
HAZARD IND.	60.85
BOYD COUNTY	60.73
EDMONSON COUNTY	60.64
PADUCAH IND.	60.36
CARLISLE COUNTY	60.31
CAMPBELLSVILLE IND.	60.19
FAIRVIEW IND.	59.99
JESSAMINE COUNTY	59.82
MARTIN COUNTY	59.75
WHITLEY COUNTY	59.40
TRIGG COUNTY	58.83
BREATHITT COUNTY	57.20
MASON COUNTY	55.67
ASHLAND IND.	55.47
TAYLOR COUNTY	55.05
MAYSVILLE IND.	52.97
WILLIAMSBURG IND.	50.56

IS INDEED THE CASE. HOWEVER, WHEN THE IMPACT OF INTELLIGENCE IS ADJUSTED SO THAT BOTH SCHOOL DISTRICTS START OFF AT THE SAME LEVEL, IT CAN BE SEEN THAT THE EMINENCE DISTRICT IS ACHIEVING GREATER EDUCATIONAL SUCCESS THAN THE ELIZABETHTOWN DISTRICT. THIS, OF COURSE, IS THE ISSUE IN THIS STUDY. WE ARE ATTEMPTING TO ANSWER THE QUESTION HOW WELL ARE PUPILS IN THE VARIOUS SCHOOL DISTRICTS DOING IN RELATION TO THEIR ABILITY RATHER THAN HOW MUCH ARE THEY ACHIEVING IN THE ABSOLUTE SENSE.

THIS TABLE PRESENTS A RANK ORDERING OF THE THIRTY-ONE SCHOOL DISTRICTS IN TERMS OF "EDUCATIONAL SUCCESS." FROM THIS TABLE, IT CAN BE SEEN THAT WHEN THE FACTOR OF INTELLIGENCE IS HELD CONSTANT THE SCHOOL DISTRICTS WHICH HAVE PUPILS WITH THE HIGHEST AVERAGE INTELLIGENCE ARE NOT NECESSARILY THE DISTRICTS WHICH ARE ACHIEVING THE GREATEST EDUCATIONAL SUCCESS. ONE WOULD NEED TO KNOW A GREAT DEAL MORE ABOUT EACH OF THE SCHOOL DISTRICTS IN ORDER TO MAKE MORE SUBSTANTIVE COMMENTS REGARDING THE OUTCOME.

ALTHOUGH THIS KNOWLEDGE OF THE SCHOOL DISTRICTS IN KENTUCKY IS LACKING, AN EXAMINATION OF A STUDY BY DIAMOND, MARTIN, AND MILLER[2] MAY HOLD SOME CLUES IN EXPLAINING THESE DIFFERENCES. THE DIAMOND, MARTIN, AND MILLER STUDY EXAMINED

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[2] WILLIAM J. DIAMOND, CHARLES F. MARTIN, SR., AND RICHARD I. MILLER. QUALITY RANKINGS OF KENTUCKY SCHOOL DISTRICTS, THE BUREAU OF SCHOOL SERVICE, COLLEGE OF EDUCATION (LEXINGTON, KY.: UNIVERSITY OF KENTUCKY) 1968.

THE QUALITY OF EDUCATION IN KENTUCKY USING A NUMBER OF VARIABLES IN ADDITION TO DATA AVAILABLE FROM A TESTING PROGRAM. THE VARIABLES WERE DIVIDED INTO THREE CATEGORIES. THEY ARE AS FOLLOWS:

INPUT	PROCESS	OUTPUT
MEDIAN GRADE ATTAINMENT AS DEFINED BY U.S. BUREAU OF CENSUS	PER PUPIL EXPENDITURE	PER CENT OF NINTH GRADERS WHO GRADUATE FROM SECONDARY SCHOOL
MEDIAN FAMILY INCOME AS DEFINED BY U.S. BUREAU OF CENSUS	ELEMENTARY TEACHER SALARY AS DETERMINED BY STATE AVERAGE	PER CENT OF HIGH SCHOOL GRADUATES WHO ENTER COLLEGE
	SECONDARY TEACHER SALARY AS DETERMINED BY STATE AVERAGE	PER CENT OF NINTH GRADERS WHO ENTER COLLEGE
	PER CENT OF ELEMENTARY TEACHERS WITH M.A. DEGREE AND AT LEAST 30 ADDITIONAL HOURS	COLLEGE QUALIFICATION TESTS BASED ON KENTUCKY NORMS
	PER CENT OF ELEMENTARY TEACHERS WHO DO NOT HAVE A BACCALAUREATE DEGREE AND CLASSIFIED AS "EMERGENCY" TEACHERS	ARMED FORCES QUALIFICATION TESTS BASED ON NATIONAL NORMS
	PER CENT OF SECONDARY TEACHERS WITH M.A. DEGREE AND AT LEAST 30 ADDITIONAL HOURS	
	PER CENT OF SECONDARY TEACHERS WHO DO NOT HAVE A BACCALAUREATE DEGREE AND CLASSIFIED AS "EMERGENCY" TEACHERS	

INPUT	PROCESS	OUTPUT
	ELEMENTARY SCHOOL LIBRARY EXPENDITURE	
	ENRICHMENT EXPENDITURE	
	TEACHER-PUPIL RATIO	
	PERCENTAGE ATTENDANCE BASED ON ADA	

AN EXAMINATION OF THE PROCESS VARIABLES ARE MOST USEFUL IN AIDING THE UNDERSTANDING OF THE PRESENT STUDY. FORTUNATELY, THE DIAMOND, MARTIN, AND MILLER STUDY DEVELOPED PROFILES FOR EACH OF THE SCHOOL DISTRICTS IN KENTUCKY, AND IT IS POSSIBLE TO EXAMINE THE PROFILES FOR THE THIRTY-ONE SCHOOL DISTRICTS INCLUDED IN THE PRESENT STUDY.

ONE OF THE DIFFICULTIES RESULTING FROM THE USE OF DATA FROM ANOTHER STUDY IS THAT THE DATA ARE PRESENTED IN FINAL FORM. IT WOULD HAVE BEEN MORE HELPFUL TO THE AUTHORS OF THIS REPORT TO HAVE HAD THE RAW DATA. THE DATA IN THE DIAMOND, MARTIN, AND MILLER STUDY WERE REPORTED IN Z SCORES (STANDARD SCORES). WHILE IT WAS NOT ALWAYS POSSIBLE TO DETERMINE THE EXACT Z SCORE FOR EACH VARIABLE, ANY ERRORS MADE ARE RELATIVELY SLIGHT. IT IS IMPORTANT TO RECOGNIZE THAT THE PROFILES WERE DEVELOPED FOR ENTIRE SCHOOL DISTRICTS AND THE STANDARD SCORES ARE BASED ON DATA FROM ALL SCHOOL DISTRICTS.

IN ORDER TO DETERMINE WHETHER OR NOT THE RESULTS REPORTED IN TABLE 3 COULD BE SUBSTANTIATED BY THE DIAMOND, MARTIN, AND MILLER STUDY, THE FIRST SIX RANKED SCHOOL DISTRICTS WERE COMPARED WITH THE LOWEST SIX RANKED SCHOOL DISTRICT IN TERMS OF THE PROCESS VARIABLES. IT IS INTERESTING TO NOTE THAT THE TOP RANKED DISTRICTS EXCEEDED THE LOWEST RANKED DISTRICTS ON THE VOLLOWING VARIABLES: SECONDARY TEACHERS' SALARIES; ELEMENTARY LIBRARY EXPENDITURE; SECONDARY LIBRARY EXPENDITURE; PER CENT OF ELEMENTARY TEACHERS WITH M.A. DEGREE; PER CENT OF SECONDARY TEACHERS WITH M.A. DEGREE; AND PER PUPIL ENRICHMENT EXPENDITURE.

IT MIGHT BE WORTH POINTING OUT THAT OF THESE VARIABLES ONLY THREE CAN BE RELATED TO ELEMENTARY SCHOOLS. THEREFORE, IT IS SOMEWHAT DIFFICULT TO EXPLAIN WHY THE VARIABLES RELAT- SOLELY TO THE SECONDARY SCHOOL SHOULD SHOW UP.

WITHOUT FULLY UNDERSTANDING THE DIFFERENCES BETWEEN A COUNTY SCHOOL DISTRICT AND AN INDEPENDENT SCHOOL DISTRICT, IT IS PERHAPS NOTEWORTHY THAT THE DATA IN TABLE 3 INDICATE NO APPARENT DIFFERENCES BETWEEN THESE DISTRICTS. OF THE FIFTEEN HIGHEST RANKED DISTRICTS, EIGHT ARE INDEPENDENT DISTRICTS AND SEVEN ARE COUNTY DISTRICTS.

ONE OF THE PROCEDURES OF THIS STUDY WAS THE DEVELOPMENT OF A MULTIPLE REGRESSION ANALYSIS TO SEE WHICH OF THE VARIABLES COULD BE CONSIDERED AS THE MOST USEFUL PREDICTORS OF EDUCATIONAL SUCCESS. IT SHOULD BE NOTED THAT WHEN THE

MULTIPLE REGRESSION WAS CARRIED OUT, IT YIELDED A MULTIPLE CORRELATION OF .86. FURTHERMORE, THIS ANALYSIS ACCOUNTED FOR 76 PER CENT OF THE VARIANCE.

THE MOST USEFUL VARIABLE, OF THE SIXTEEN EXAMINED, IN ACCOUNTING FOR EDUCATIONAL SUCCESS WAS PER CENT SUPPLEMENT, BY DISTRICT, FOR TEACHERS' SALARIES. THIS VARIABLE IS HIGHLY CORRELATED WITH ANNUAL CURRENT EXPENSES PER PUPIL IN A.D.A. AND AVERAGE ANNUAL SALARIES FOR CLASSROOM TEACHERS. AS SUCH, ADDING THESE VARIABLES TO PER CENT OF SUPPLEMENT DOES NOT YIELD ANY BETTER PREDICTOR. THE NEXT MOST USEFUL VARIABLE IN PREDICTING EDUCATIONAL SUCCESS WAS PER PUPIL COST FOR EDUCATIONAL SUPPLIES AND BOOKS. THIS MEANS THAT WHEN THE VARIABLE OF PER PUPIL COST FOR EDUCATIONAL SUPPLIES AND BOOKS IS ADDED TO THE VARIABLE OF PER CENT OF SUPPLEMENT, WE HAVE A BETTER PREDICTOR THAN IF ONLY ONE VARIABLE WAS USED. THE FOLLOWING ARE THE FIVE MOST USEFUL FACTORS, WHEN TAKEN AS A GROUP, IN PREDICTING EDUCATIONAL SUCCESS AT THE FOURTH GRADE LEVEL:

PER CENT SUPPLEMENT BY DISTRICT, FOR TEACHERS' SALARIES
PER PUPIL COST FOR EDUCATIONAL SUPPLIES AND BOOKS
AVERAGE NUMBER OF PUPILS PER TEACHER
ATTENDANCE
PER CENT OF PUPILS RETAINED IN THE SAME GRADE

EIGHTH GRADE DATA

IN ADDITION TO THE FOURTH GRADE, THE EIGHTH GRADE WAS ALSO USED IN THIS STUDY. TABLE 4 PRESENTS THE DATA ON THE AVERAGE ABILITY AND AVERAGE ACHIEVEMENT OF EIGHTH GRADERS FOR EACH OF THE THIRTY-ONE SCHOOL DISTRICTS IN THIS STUDY.

IT SHOULD BE NOTED THAT AT THE EIGHTH GRADE LEVEL THE DATA WERE MISSING FOR THE CARLISLE COUNTY SCHOOL DISTRICT. THEREFORE, ALL THE INFORMATION TO BE PRESENTED IN THIS SECTION OF THE REPORT WILL BE BASED ON THIRTY SCHOOL DISTRICTS.

ONE MIGHT NOTE THAT, GENERALLY SPEAKING, THE AVERAGE ABILITY OF EACH SCHOOL DISTRICT AS MEASURED BY THE CALIFORNIA TEST IS LOWER FOR EIGHTH GRADERS THAN IT WAS FOR FOURTH GRADERS. TWO SCHOOL DISTRICTS, MURRAY INDEPENDENT AND MASON COUNTY REMAINED AT THE SAME LEVEL, WHILE CAMPBELLSVILLE INDEPENDENT, CLAY COUNTY, EMINENCE INDEPENDENT, FAIRVIEW INDEPENDENT, MAYSVILLE INDEPENDENT, AND TRIGG COUNTY WENT UP. THE AUTHORS ARE HARD PUT TO EXPLAIN THIS SITUATION. HOWEVER, IT MIGHT BE POINTED OUT THAT OF THE SIX SCHOOL DISTRICTS WHERE EIGHTH GRADE PUPILS SHOWED HIGHER ABILITY THAN FOURTH GRADE PUPILS IN THE SAME DISTRICT, FOUR OF THESE ARE INDEPENDENT SCHOOL DISTRICTS.

TABLE 5 CONTAINS THE ADJUSTED ACHIEVEMENT OF THE THIRTY SCHOOL DISTRICTS. THIS ADJUSTED ACHIEVEMENT IS THE RESULT OBTAINED WHEN THE FACTOR OF INTELLIGENCE IS STATISTICALLY CONTROLLED.

TABLE 4

AVERAGE ABILITY AND AVERAGE ACHIEVEMENT BASED ON DATA FROM EIGHTH GRADE PUPILS

DISTRICT	AVE. ABILITY	AVE. ACH.
ALLEN COUNTY	103.57	89.14
ASHLAND IND.	100.37	90.41
BOYD COUNTY	96.06	88.01
BOYLE COUNTY	93.45	81.46
BREATHITT COUNTY	91.04	83.31
CAMPBELLSVILLE IND.	100.10	92.40
CLAY COUNTY	93.76	82.59
CORBIN IND.	100.90	94.96
EDMONSON COUNTY	92.68	80.44
ELIZABETHTOWN IND.	104.55	86.44
EMINENCE IND.	99.42	90.88
FAIRVIEW IND.	103.14	89.77
GRAYSON COUNTY	93.81	83.10
HAZARD IND.	99.69	93.63
JESSAMINE COUNTY	96.60	83.99
LEITCHFIELD IND.	100.91	95.63
MARTIN COUNTY	91.64	78.66
MASON COUNTY	98.29	92.37
MAYSVILLE IND.	96.69	84.86
MURRAY IND.	106.54	86.16
NELSON COUNTY	95.16	85.60
PADUCAH IND.	102.82	93.32
PARIS IND.	98.14	89.78
SCOTTSVILLE IND.	89.60	76.71
SPENCER COUNTY	99.50	91.04
TAYLOR COUNTY	96.80	91.64
TRIGG COUNTY	97.88	86.26
WHITLEY COUNTY	88.22	77.70
WILLIAMSBURG IND.	98.06	89.59
WOODFORD COUNTY	97.22	86.90
ALL DISTRICTS	97.16	87.02

TABLE 5

ADJUSTED AVERAGE ACHIEVEMENT BY RANKS BASED ON DATA FROM EIGHTH GRADE PUPILS

DISTRICT	ADJUSTED AVERAGE
SPENCER COUNTY	69.79
EMINENCE IND.	67.30
NELSON COUNTY	65.89
CLAY COUNTY	65.58
MURRAY IND.	65.05
PARIS IND.	64.94
LEITCHFIELD IND.	64.73
ALLEN COUNTY	64.51
SCOTTSVILLE IND.	64.24
WOODFORD COUNTY	63.13
CORBIN IND.	62.55
BOYLE COUNTY	62.35
ELIZABETHTOWN IND.	62.12
GRAYSON COUNTY	62.09
HAZARD IND.	60.85
BOYD COUNTY	60.73
EDMONSON COUNTY	60.64
PADUCAH IND.	60.36
CARLISLE COUNTY	60.31
CAMPBELLSVILLE IND.	60.19
FAIRVIEW IND.	59.99
JESSAMINE COUNTY	59.82
MARTIN COUNTY	59.75
WHITLEY COUNTY	59.40
TRIGG COUNTY	58.83
BREATHITT COUNTY	57.20
MASON COUNTY	55.67
ASHLAND IND.	55.47
TAYLOR COUNTY	55.05
MAYSVILLE IND.	52.97
WILLIAMSBURG IND.	50.56

IT IS INTERESTING TO NOTE THAT MANY SCHOOL DISTRICTS HAVE SHIFTED RANKS WHEN COMPARED ON THE FACTOR OF ADJUSTED ACHIEVEMENT OF EIGHTH GRADERS AND FOURTH GRADERS. IN FACT, NONE OF THE SCHOOL DISTRICTS WHICH RANKED AMONG THE SIX HIGHEST ACCORDING TO THE PERFORMANCE OF EIGHTH GRADE PUPILS WERE RANKED QUITE AS HIGH BASED ON THE PERFORMANCE OF FOURTH GRADE PUPILS. IN FACT, MASON COUNTY AND TAYLOR COUNTY SCHOOL DISTRICTS WERE RANKED AMONG THE LOWEST SIX DISTRICTS BASED ON THE PERFORMANCE OF FOURTH GRADE PUPILS, BUT ARE RANKED AMONG THE SIX HIGHEST DISTRICTS BASED ON THE PERFORMANCE OF EIGHTH GRADE PUPILS.

TABLE 6 SHOWS A COMPARISON OF THE RANKINGS OF THE SCHOOL DISTRICTS BASED ON THE PERFORMANCE OF FOURTH GRADE AND EIGHTH GRADE PUPILS.

A COEFFICIENT OF CORRELATION COMPUTED ON THESE DATA YIELDED -.14. THIS COEFFICIENT INDICATES THAT THERE IS A SLIGHT NEGATIVE RELATIONSHIP BETWEEN THE RANKINGS OF THE SCHOOL DISTRICTS WHEN THE PERFORMANCE OF EIGHTH GRADE PUPILS ARE COMPARED WITH THE PERFORMANCE OF FOURTH GRADE PUPILS. ALTHOUGH THE COEFFICIENT OF CORRELATION IS SLIGHT, THE FACT THAT IT IS NEGATIVE REVEALS THE SHIFTING OF POSITIONS INDICATED EARLIER. ONE MUST REMEMBER THAT THIS MEASURE (CORRELATION) INDICATES A DEGREE OF RELATIONSHIP BETWEEN THE VARIABLES. THE HIGHER THE COEFFICIENT, THE STRONGER THE RELATIONSHIP.

TABLE 6

COMPARISON OF RANKING OF SCHOOL DISTRICTS BASED ON PERFORMANCE OF 4TH & 8TH GRADE PUPILS

DISTRICT	4TH GRADE	8TH GRADE
ALLEN COUNTY	8	29
ASHLAND IND.	28	14
BOYD COUNTY	16	7
BOYLE COUNTY	12	23
BREATHITT COUNTY	26	9
CAMPBELLSVILLE IND.	20	6
CLAY COUNTY	4	20
CORBIN IND.	11	3
EDMONSON COUNTY	17	24
ELIZABETHTOWN IND.	13	17
EMINENCE IND.	2	11
FAIRVIEW IND.	21	25
GRAYSON COUNTY	14	18
HAZARD IND.	15	5
JESSAMINE COUNTY	22	26
LEITCHFIELD IND.	7	1
MARTIN COUNTY	23	27
MASON COUNTY	27	4
MAYSVILLE IND.	30	22
MURRAY IND.	5	30
NELSON COUNTY	3	15
PADUCAH IND.	18	13
PARIS IND.	6	10
SCOTTSVILLE IND.	9	28
SPENCER COUNTY	1	8
TAYLOR COUNTY	29	2
TRIGG COUNTY	25	21
WHITLEY COUNTY	24	19
WILLIAMSBURG IND.	31	12
WOODFORD COUNTY	10	16

AN EXAMINATION OF THE PROCESS VARIABLES AND THE SCHOOL PROFILES FROM THE DIAMOND, MARTIN, AND MILLER STUDY REVEALS THAT THE SIX HIGHEST RANKED SCHOOL DISTRICTS AND THE SIX LOWEST RANKED SCHOOL DISTRICTS (RANKED IN TERMS OF THE PERFORMANCE OF PUPILS IN THE EIGHTH GRADE) WERE DISTINGUISHABLE ON THE FOLLOWING VARIABLES: SECONDARY TEACHERS' SALARIES; PER CENT OF ATTENDANCE; PER CENT OF ELEMENTARY TEACHERS WITHOUT THE B.A. DEGREE; PER CENT OF SECONDARY TEACHERS WITHOUT THE B.A. DEGREE; AND PUPIL-TEACHER LOAD.

SEVERAL OF THE VARIABLES WHICH DISTINGUISH THE HIGHEST RANKED SCHOOL DISTRICTS FROM THOSE RANKED LOWEST APPEAR IN THE STUDY FOR THE FIRST TIME WHEN THE RANKINGS ARE BASED ON THE PERFORMANCE OF PUPILS IN THE EIGHTH GRADE. SPECIFICALLY, THE FACTORS OF ATTENDANCE, PER CENT OF ELEMENTARY TEACHERS WITH THE B.A. DEGREE, AND PUPIL-TEACHER RATIO APPEAR AS IMPORTANT VARIABLES FOR THE FIRST TIME. ON THE OTHER HAND, SUCH VARIABLES AS: ELEMENTARY LIBRARY EXPENDITURE; SECONDARY LIBRARY EXPENDITURE; PER CENT OF ELEMENTARY TEACHERS WITH THE M.A. DEGREE; PER CENT OF SECONDARY TEACHERS WITH THE M.A. DEGREE; AND PER PUPIL ENRICHMENT EXPENDITURE ARE NO LONGER RELEVANT TO THE RANKINGS BASED ON PERFORMANCE OF EIGHTH GRADE PUPILS ALTHOUGH THEY WERE IMPORTANT VARIABLES WHICH DISTINGUISHED BETWEEN THE HIGHEST AND LOWEST RANKED SCHOOL DISTRICTS WHEN THE DATA WERE BASED ON THE PERFORMANCE OF FOURTH GRADE PUPILS.

THE MULTIPLE REGRESSION ANALYSIS BASED ON THE DATA FOR EIGHTH GRADE PUPILS YIELDED A MULTIPLE CORRELATION OF .90. MOREOVER, THIS ANALYSIS ACCOUNTED FOR 81 PER CENT OF THE VARIANCE.

THE MOST USEFUL VARIABLE IN PREDICTING EDUCATIONAL SUCCESS ACCORDING TO THE MULTIPLE REGRESSION ANALYSIS IS PER CENT OF PUPILS RETAINED IN THE SAME GRADE. THE NEXT MOST USEFUL PREDICTOR IS AVERAGE NUMBER OF PUPILS PER TEACHER. IN RANK ORDER, THE FIVE MOST USEFUL PREDICTOR VARIABLES ARE; PER CENT OF PUPILS RETAINED IN SAME GRADE; AVERAGE NUMBER OF PUPILS PER TEACHER; PER CENT SUPPLEMENT, BY DISTRICT, FOR TEACHERS' SALARIES; PER CENT OF TOTAL PUPILS FOR WHOM SPECIAL VOCATIONAL EDUCATION PROGRAMS ARE PROVIDED; AND ATTENDANCE.

IN GENERAL, THE MULTIPLE REGRESSION ANALYSIS IS SUPPORTED BY THE DATA IN THE DIAMOND, MARTIN, AND MILLER STUDY. IT MIGHT BE INTERESTING TO POINT OUT THAT AN EXAMINATION OF THE PREDICTOR VARIABLES, BASED ON THE MULTIPLE REGRESSION ANALYSIS, REMAIN FAIRLY STABLE. OF THE FIVE MOST USEFUL PREDICTOR VARIABLES BASED ON THE PERFORMANCE DATA OF FOURTH GRADE PUPILS, FOUR OF THE SAME VARIABLES ARE FOUND TO BE USEFUL IN PREDICTING EDUCATIONAL SUCCESS BASED ON THE PERFORMANCE DATA OF EIGHTH GRADE PUPILS.

ELEVENTH GRADE DATA

THE FINAL GROUP OF STUDENTS WHO WERE USED IN THE PILOT TESTING PROGRAM WERE PUPILS WHO WERE IN THE ELEVENTH GRADE. TABLE 7 CONTAINS THE INFORMATION RELATING TO THE AVERAGE ABILITY AND AVERAGE ACHIEVEMENT PERFORMANCE OF THE SCHOOL DISTRICTS BASED ON DATA COLLECTED FROM ELEVENTH GRADE PUPILS.

IT SHOULD BE NOTED THAT THE RESULTS REPORTED IN THIS SECTION OF THE REPORT WERE BASED ON DATA COLLECTED FROM TWENTY-NINE SCHOOL DISTRICTS IN COMPARISON TO THIRTY-ONE SCHOOL DISTRICTS AT THE FOURTH GRADE LEVEL AND THIRTY SCHOOL DISTRICTS AT THE EIGHTH GRADE LEVEL.

A COMPARISON OF TABLES INDICATES THAT SOME SHIFTING HAS TAKEN PLACE. TABLE 8 PRESENTS THE RANK ORDERING OF TWENTY-NINE SCHOOL DISTRICTS AS MEASURED BY THE PERFORMANCE OF ELEVENTH GRADE PUPILS WHEN THE FACTOR OF INTELLIGENCE IS STATISTICALLY CONTROLLED.

IN FOURTEEN (14) SCHOOL DISTRICTS THE PERFORMANCE OF ELEVENTH GRADE PUPILS WAS SIGNIFICANTLY HIGHER THAN THE PERFORMANCE OF EIGHTH GRADE PUPILS AT THE SAME SCHOOL DISTRICTS. IN TEN (10) SCHOOL DISTRICTS THERE WAS VIRTUALLY NO CHANGE IN THE ABILITY LEVELS OF EIGHTH AND ELEVENTH GRADE PUPILS. A COMPARISON OF TABLES 1 AND 8 INDICATES THAT IN THIRTEEN (13) SCHOOL DISTRICTS FOURTH GRADE PUPILS SHOWED MORE ABILITY THAN PUPILS IN THE ELEVENTH GRADE, IN TWELVE (12)

TABLE 7

AVERAGE ABILITY AND AVERAGE ACHIEVEMENT BASED ON DATA FROM ELEVENTH GRADE PUPILS

DISTRICT	AVE. ABILITY	AVE. ACH.
ALLEN COUNTY	99.76	119.26
ASHLAND IND.	101.16	121.92
BOYD COUNTY	97.52	110.23
BOYLE COUNTY	100.12	109.82
BREATHITT COUNTY	87.62	102.48
CAMPBELLSVILLE IND.	102.47	118.59
CARLISLE COUNTY	105.08	128.62
CLAY COUNTY	94.50	111.55
CORBIN IND.	96.97	121.97
EDMONSON COUNTY	97.22	114.94
ELIZABETHTOWN IND.	107.61	126.98
EMINENCE IND.	98.62	113.78
FAIRVIEW IND.	98.23	112.20
GRAYSON COUNTY	89.73	109.21
HAZARD IND.	102.08	127.92
JESSAMINE COUNTY	100.30	120.80
LEITCHFIELD IND.	104.67	121.00
MARTIN COUNTY	82.55	98.59
MASON COUNTY	96.93	116.29
MAYSVILLE IND.	97.32	114.84
MURRAY IND.	107.10	118.20
NELSON COUNTY	91.39	108.80
PADUCAH IND.	103.26	120.36
PARIS IND.	94.89	107.82
SCOTTSVILLE IND.	100.95	116.33
SPENCER COUNTY	99.68	123.85
TAYLOR COUNTY	95.17	114.09
TRIGG COUNTY	97.76	118.28
WILLIAMSBURG IND.	92.93	111.15

TABLE 8

ADJUSTED AVERAGE ACHIEVEMENT BY RANKS BASED ON DATA FROM ELEVENTH GRADE PUPILS

DISTRICT	ADJUSTED AVERAGE
HAZARD IND.	123.75
CORBIN IND.	122.53
SPENCER COUNTY	121.90
CARLISLE COUNTY	121.67
ASHLAND IND.	118.59
JESSAMINE COUNTY	118.28
TRIGG COUNTY	118.10
ELIZABETHTOWN IND.	117.69
ALLEN COUNTY	117.23
MASON COUNTY	116.88
GRAYSON COUNTY	116.48
TAYLOR COUNTY	116.32
WILLIAMSBURG IND.	115.45
EDMONSON COUNTY	115.28
PADUCAH IND.	115.11
MAYSVILLE IND.	115.08
NELSON COUNTY	114.52
LEITCHFIELD IND.	114.44
CLAY COUNTY	114.39
CAMPBELLSVILLE IND.	114.06
SCOTTSVILLE IND.	113.20
EMINENCE IND.	112.82
MARTIN COUNTY	112.50
BREATHITT COUNTY	111.70
FAIRVIEW IND.	111.59
PARIS IND.	110.31
BOYD COUNTY	110.28
MURRAY IND.	109.38
BOYLE COUNTY	107.47

SCHOOL DISTRICTS ELEVENTH GRADE PUPILS SHOWED MORE ABILITY THAN FOURTH GRADERS, AND IN FOUR SCHOOL DISTRICTS THERE WAS NO CHANGE.

TABLE 9 HOLDS THE RANK ORDERING OF EACH SCHOOL DISTRICT BASES ON THE PERFORMANCE DATA OF FOURTH, EIGHTH, AND ELEVENTH GRADE PUPILS.

ONE CAN READILY NOTE THAT SOME SHIFTING OF THE RANKINGS HAVE TAKEN PLACE. WHEN THE RANKINGS OF SCHOOLS BASED ON THE PERFORMANCE DATA OF PUPILS IN THE EIGHTH GRADE ARE COMPARED WITH THE RANKINGS BASED ON THE PERFORMANCE OF ELEVENTH GRADE PUPILS ONE NOTES THAT THE SHIFTING IS NOT AS GREAT AS BETWEEN THE FOURTH AND EIGHTH GRADES. RANK ORDER CORRELATION COMPUTED BETWEEN THE RANKINGS BASED ON EIGHTH AND ELEVENTH GRADE PUPIL PERFORMANCE YIELDED A CORRELATION COEFFICIENT OF .28. THIS WOULD INDICATE SOME SLIGHT RELATIONSHIP BETWEEN THE RANKINGS OF SCHOOL DISTRICTS BASED ON EIGHTH AND ELEVENTH GRADE DATA. HOWEVER, WHEN THE RANKINGS BASED ON ELEVENTH GRADE PERFORMANCE ARE COMPARED WITH THE RANKINGS BASED ON FOURTH GRADE PERFORMANCE THE CORRELATION COEFFICIENT IS -.36. THIS WOULD INDICATE AN INVERSE RELATIONSHIP THAT IS MODERATE. THAT MEANS, THAT SOME SCHOOL DISTRICTS WHICH RANKED HIGH WHEN JUDGED ON THE PERFORMANCE OF FOURTH GRADE PUPILS RANKED LOW WHEN JUDGED ON THE PERFORMANCE BASED ON DATA FROM ELEVENTH GRADE STUDENTS AND VICE VERSA.

TABLE 9

COMPARISON OF RANKINGS OF SCHOOL DISTRICTS

DISTRICT	4TH GRADE	8TH GRADE	11TH GRADE
ALLEN COUNTY	8	29	9
ASHLAND IND.	28	14	5
BOYD COUNTY	16	7	27
BOYLE COUNTY	12	23	29
BREATHITT COUNTY	26	9	24
CAMPBELLSVILLE IND.	20	6	20
CLAY COUNTY	4	20	19
CORBIN IND.	11	3	2
EDMONSON COUNTY	17	24	14
ELIZABETHTOWN IND.	13	17	8
EMINENCE IND.	2	11	22
FAIRVIEW IND.	21	25	25
GRAYSON COUNTY	14	18	11
HAZARD IND.	15	5	1
JESSAMINE COUNTY	22	26	6
LEITCHFIELD IND.	7	1	18
MARTIN COUNTY	23	27	23
MASON COUNTY	27	4	10
MAYSVILLE IND.	30	22	16
MURRAY IND.	5	30	28
NELSON COUNTY	3	15	17
PADUCAH IND.	18	13	15
PARIS IND.	6	10	26
SCOTTSVILLE IND.	9	28	21
SPENCER COUNTY	1	8	3
TAYLOR COUNTY	29	2	12
TRIGG COUNTY	25	21	7
WHITLEY COUNTY	24	19	NA*
WILLIAMSBURG IND.	31	12	13
WOODFORD COUNTY	10	16	NA
CARLISLE COUNTY	19	NA	4

*NA INDICATES THAT DATA WERE MISSING IN THESE GRADE LEVELS

THE FACT THAT THERE IS A GREAT DEAL OF INSTABILITY IN THESE DATA WHEN SCHOOLS ARE RANKED ON THE PERFORMANCE OF THE DIFFERENT GRADE LEVELS WOULD INDICATE A REALISTIC INABILITY TO DISCUSS QUALITY EDUCATION OR EDUCATIONAL OVER THE TOTAL SCHOOL PROGRAM. IT IS PERHAPS MORE REALISTIC THEN, TO DISCUSS EDUCATIONAL SUCCESS FOR GRADE LEVEL RATHER THAN FOR A TOTAL EDUCATIONAL PROGRAM IN A SCHOOL DISTRICT. ONE MUST ALWAYS BE PREPARED TO RECOGNIZE THAT THE SIGNIFICANT FACTORS WHICH MIGHT ACCOUNT FOR THE OBSERVED DIFFERENCES ARE NOT READILY APPARENT FROM THE DATA.

AN EXAMINATION OF THE PROCESS VARIABLES AND PROFILES FROM THE DIAMOND, MARTIN, AND MILLER STUDY REVEALS THAT ON ONLY TWO VARIABLES DO THE HIGHEST RANKED SCHOOLS EXCEED THE LOWEST RANKED SCHOOLS. THE TWO VARIABLES ARE: PER CENT OF SECONDARY TEACHERS WITH THE M.A. DEGREE AND TEACHER-PUPIL LOAD. ON MOST OF THE OTHER VARIABLES, THE LOWEST RANKED SCHOOL DISTRICTS EXCEEDED THE HIGHEST RANKED DISTRICTS.

THE MULTIPLE REGRESSION ANALYSIS BASED ON THE PERFORMANCE OF ELEVENTH GRADE PUPILS YIELDED A MULTIPLE CORRELATION OF .90. FURTHERMORE, THIS ANALYSIS ACCOUNTED FOR 80 PER CENT OF THE VARIANCE.

THE MOST USEFUL VARIABLE FOR PREDICTING EDUCATIONAL SUCCESS AT THIS LEVEL IS THE NUMBER OF PUPILS PER ADMINISTRATOR. THE NEXT MOST IMPORTANT VARIABLE IS PER CENT SUPPLEMENT, BY DISTRICT, FOR TEACHERS; SALARIES. THE FIVE

MOST USEFUL PREDICTORS, IN RANK ORDER, ARE: NUMBER OF PUPILS PER ADMINISTRATOR; PER CENT SUPPLEMENT, BY DISTRICT, FOR TEACHERS' SALARIES; PER PUPIL COST FOR EDUCATIONAL SUPPLIES AND BOOKS; PER CENT OF PUPILS RETAINED IN SAME GRADE; AND ATTENDANCE.

IT SHOULD BE NOTED THAT FOUR OF THE FIVE VARIABLES THAT APPEAR TO BE USEFUL AT THIS GRADE LEVEL HAVE SHOWN UP AS BEING USEFUL PREDICTORS AT OTHER LEVELS. IN FACT, THREE OF THESE VARIABLES, PER CENT SUPPLEMENT, BY DISTRICT, FOR TEACHERS' SALARIES; ATTENDANCE, AND PER CENT OF PUPILS RETAINED IN GRADE LEVEL SHOW UP AT ALL THREE GRADE LEVELS. TWO VARIABLES, PER PUPIL COST FOR EDUCATIONAL SUPPLIES AND AVERAGE NUMBER OF PUPILS PER TEACHER SHOW UP AS BEING USEFUL PREDICTORS IN TWO GRADE LEVELS.

CONCLUSIONS

AT THIS POINT, THE READER SHOULD BE REMINDED OF THE CAUTIONS THE RESEARCHERS LISTED EARLIER UNDER THE LIMITATIONS OF THE STUDY. THESE CAUTIONS MUST BE EXERCISED AT THIS POINT IN RECOGNIZING SOME OF THE INHERENT WEAKNESSES IN THE TEST DATA. THE AUTHORS MAKE NO ATTEMPT TO GENERALIZE THE FINDINGS FROM THIS STUDY, AND INDEED, ARE SOMEWHAT TIMID IN MAKING FULL USE OF THE DATA. IN GOOD CONSCIENCE, WE CANNOT DENY THAT SOME OF THE DIFFICULTIES OF IMPLEMENTING A TESTING PROGRAM MAY HAVE HAD SOME INFLUENCE ON THE DATA.

THE RANKINGS OF SCHOOL DISTRICTS BASED ON THE PERFORMANCE DATA OF FOURTH, EIGHTH, AND ELEVENTH GRADE PUPILS SHOWED A SIGNIFICANT AMOUNT OF SHIFTING. THAT IS, THE SCHOOLS WHICH RANKED HIGH BASED ON PERFORMANCE DATA OF FOURTH GRADE PUPILS DID NOT MAINTAIN THE SAME POSITION WHEN THE RANKINGS WERE BASED ON DATA FROM EIGHTH GRADE PUPILS. FURTHERMORE, THERE WAS AN INVERSE RELATIONSHIP BETWEEN THE RANKINGS BASED ON FOURTH GRADE DATA AND THE RANKINGS BASED ON ELEVENTH GRADE DATA. THE CORRELATION COEFFICIENT BETWEEN THE RANKINGS BASED ON THE DATA FROM FOURTH GRADE PUPILS AND THE DATA FROM EIGHTH GRADE PUPILS WAS .14; BETWEEN THE RANKINGS BASED ON DATA FROM EIGHTH AND ELEVENTH GRADE PUPILS THE CORRELATION WAS .28; AND BETWEEN THE RANKINGS BASED ON DATA FROM FOURTH AND ELEVENTH GRADE PUPILS, IT WAS -.36.

THESE CORRELATIONS DEMONSTRATE A LACK OF CONSTANCY OF ORDINAL POSITIONS FROM ONE GRADE TO THE NEXT. THEREFORE, IT IS DIFFICULT TO SELECT ONE OR SEVERAL SCHOOL DISTRICTS WHICH CONSISTENTLY RANK HIGH ON THE CRITERION MEASURE OF EDUCATIONAL SUCCESS. THE ONLY SCHOOL DISTRICT WHICH WAS AMONG THE TEN HIGHEST RANKED SCHOOL DISTRICTS OVER THE THREE GRADE LEVELS IS SPENCER COUNTY. CORBIN INDEPENDENT DISTRICT BARELY MISSED BY BEING RANKED ELEVENTH BASED ON DATA FROM THE FOURTH GRADE. PERHAPS IT WOULD BE MORE REASONABLE TO DISCUSS EDUCATIONAL SUCCESS BY RELATING IT TO GRADE LEVEL RATHER THAN ATTEMPT TO DISCUSS THIS FACTOR OVER THE ENTIRE BREADTH OF THE INSTRUCTIONAL PROGRAM.

AN ATTEMPT TO SUBSTANTIATE THE FINDINGS WAS MADE BY EXAMINING THE RESULTS OF A STUDY BY DIAMOND, MARTIN, AND MILLER. THE SCHOOL DISTRICTS WHICH RANKED HIGH BASED ON THE PERFORMANCE DATA OF FOURTH GRADE PUPILS WERE COMPARED WITH SCHOOL DISTRICTS WHICH APPEARED AT THE BOTTOM OF THE RANKINGS. THE HIGHEST RANKED DISTRICTS EXCEEDED THE LOWEST RANKED ON THE FOLLOWING VARIABLES: SECONDARY TEACHERS' SALARIES; ELEMENTARY LIBRARY EXPENDITURES; SECONDARY LIBRARY EXPENDITURES; PER CENT OF ELEMENTARY TEACHERS WITH THE M.A. DEGREE; PER CENT OF SECONDARY TEACHER WITH THE M.A. DEGREE; AND PER PUPIL ENRICHMENT EXPENDITURE.

A STEPWISE REGRESSION ANALYSIS REVEALED THAT OF THE SIXTEEN FACTORS EXAMINED, THE FIVE MOST USEFUL PREDICTORS, IN RANK ORDER, WERE: PER CENT SUPPLEMENT, BY DISTRICT, FOR TEACHERS' SALARIES; PER PUPIL COST FOR EDUCATIONAL SUPPLIES AND BOOKS; AVERAGE NUMBER OF PUPILS PER TEACHER; ATTENDANCE; AND PER CENT OF PUPILS RETAINED IN THE SAME GRADE.

THE DATA FROM EIGHTH GRADE PUPILS WERE COMPARED WITH THE DIAMOND, MARTIN, AND MILLER STUDY. HERE, THE HIGHEST RANKED SCHOOL DISTRICTS EXCEEDED THE LOWEST RANKED DISTRICTS ON THE FOLLOWING VARIABLES: SECONDARY TEACHERS' SALARIES; PER CENT OF ATTENDANCE; PER CENT OF ELEMENTARY TEACHERS WITH THE B.A. DEGREE; PER CENT OF SECONDARY TEACHER WITH THE B.A. DEGREE; AND PUPIL-TEACHER LOAD. THE REGRESSION ANALYSIS

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INDICATED THAT THE FIVE MOST USEFUL PREDICTORS ARE: PER CENT OF PUPILS RETAINED IN THE SAME GRADE; AVERAGE NUMBER OF PUPILS PER TEACHER; PER CENT SUPPLEMENT, BY DISTRICT, FOR TEACHERS' SALARIES; PER CENT OF TOTAL PUPILS FOR WHOM SPECIAL VOCATIONAL PROGRAMS ARE PROVIDED; AND PER CENT OF NINTH GRADERS COMPLETING HIGH SCHOOL.

WHEN THE DATA FROM ELEVENTH GRADE PUPILS WERE COMPARED WITH THE DIAMOND, MARTIN, AND MILLER STUDY THERE WERE ONLY TWO VARIABLES ON WHICH THE HIGHEST RANKED SCHOOL DISTRICTS EXCEEDED THE LOWEST RANKED DISTRICTS. THESE TWO VARIABLES ARE: PER CENT OF SECONDARY TEACHERS WITH THE M.A. DEGREE AND PUPIL-TEACHER LOAD. THE REGRESSION ANALYSIS INDICATED THAT THE FIVE MOST USEFUL PREDICTORS AT THIS GRADE LEVEL ARE: NUMBER OF PUPILS PER ADMINISTRATOR; ANNUAL AVERAGE SALARIES FOR CLASSROOM TEACHERS; PER PUPIL COST FOR EDUCATIONAL SUPPLIES AND BOOKS; PER CENT OF PUPILS RETAINED IN THE SAME GRADE; AND ATTENDANCE.

AN EXAMINATION OF THE DATA FROM THIS STUDY IN COMPARISON WITH THE DATA FROM THE DIAMOND, MARTIN, AND MILLER STUDY IS INTEREST, BUT SOMEWHAT UNSTABLE. THERE IS NO SINGLE VARIABLE IN THE DIAMOND, MARTIN, AND MILLER STUDY WHICH APPEARS TO BE SIGNIFICANT OVER THE THREE GRADE LEVELS EXAMINED IN THIS STUDY. THAT IS, THERE IS NOT A SINGLE VARIABLE WHICH APPEARS IN EACH GRADE LEVEL FOR WHICH THE

HIGHEST RANKED SCHOOL DISTRICTS EXCEEDED THE LOWEST RANKED SCHOOL DISTRICTS. ON THE OTHER HAND, THE STEPWISE MULTIPLE REGRESSION ANALYSIS PERFORMED ON THE DATA FROM ALL THREE GRADE LEVELS PRODUCED THREE VARIABLES AS BEING USEFUL IN PREDICTING EDUCATIONAL SUCCESS IN ALL THREE GRADE LEVELS. THESE VARIABLES ARE: PER CENT OF SUPPLEMENT, BY DISTRICT, FOR TEACHERS' SALARIES, ATTENDANCE, AND PER CENT OF PUPILS RETAINED IN THE SAME GRADE. FURTHERMORE, TWO OTHER VARIABLES, PER PUPIL COST FOR EDUCATIONAL SUPPLIES AND BOOKS AND PER CENT OF TEACHERS HOLDING THE M.A. DEGREE OR HIGHER, APPEAR AS BEING USEFUL PREDICTORS IN TWO GRADE LEVELS. OF COURSE, THERE ARE SEVERAL VARIABLES WHICH DO NOT SHOW UP AS BEING USEFUL IN PREDICTING EDUCATIONAL SUCCESS. THIS, AS IT HAS BEEN NOTED EARLIER, MAY BE DUE TO THE FACT THAT THEY CORRELATE HIGHLY WITH SOME OTHER VARIABLE. THAT IS, THEY ARE NOT INDEPENDENT FACTORS AND THUS, DO NOT ADD TO THE USEFULNESS OF PREDICTION.

THE FOREGOING INTERPRETATION OF THE FINDINGS AND THE CONCLUSIONS OF THIS STUDY WERE PRESENTED SO THAT OTHER PERSONS USING THE TECHNIQUE DEVELOPED BY THE RESEARCHERS CAN SEE HOW THE DATA ARE PROCESSED. BY THIS, WE DO NOT MEAN TO IMPLY THAT WE HAVE EXHAUSTED ALL POSSIBLE EXPLANATIONS AND EXAMINATIONS. HOWEVER, WE NOTED EARLIER THAT IT WAS THE MAJOR PURPOSE OF THIS STUDY TO DEVELOP A MODEL FOR

ASSESSING EDUCATIONAL SUCCESS IN THE KENTUCKY SCHOOLS. THEREFORE, OUR PRIME PURPOSE WAS THE DEVELOPMENT OF THIS MODEL; THE PROCESSING OF DATA THROUGH THE MODEL IS INTENDED TO BE ILLUSTRATIVE OF THE PROCESS. THE AUTHORS BELIEVE THAT THE TERM "EDUCATIONAL SUCCESS" AS DEFINED HEREIN PROVIDES A MORE ADEQUATE AND ACCURATE METHOD FOR ASSESSING EDUCATION IN THE SCHOOLS.

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